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Effects of Some Faulty Contraceptive Methods on the Male

• Max Huhner, M.D., New York, N. Y.

I WILL limit myself to the above title. In other words, this will not be a paper on contraception in general.

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The simplest method of contraception in the male is self-control. This is a method that has been advocated by many prominent clergymen. I would most emphatically speak against this method. While continence is practical and to be advised for the unmarried man or youth, it is absolutely contra-indicated in the married. The former can, if he so desires, keep away from all sexual temptations, and though it may at times be difficult, withhold all sexual relationship until he is married.

With the married man, conditions are entirely different. He is continuously under the sexual stimulation of his wife, whether he indulges in coitus or not. He lives with her and is more or less in physical contact with her. If she should be a normal woman with normal sexual inclinations, the state of affairs becomes even more acute. From a purely physiological point of view, continence is absolutely harmful in this state of affairs. The entire sexual apparatus is continuously in a state of sexual turgescence, the various organs and centers implicated in the sexual act become hyperirritable, and should this condition last for any length of time, rapid or premature ejaculation and finally complete impotence will take place when he again attempts coitus.

That the above sequence of events is not mere theorizing but actually takes place is proven by those cases in which young folks are engaged for a very long time, during which time they engaged in prolonged and frequent periods of spooning, without normal sexual relief. If this pathological sequence follows sexual excitement in the unmarried who only have occasion to see each other at intervals, how much more disastrous must be the effect when the two parties see each other more or less often.

It is also a fact that the attempts at self-control are often not successful and have the most dire results. In many cases the man will seek to obtain outside what he cannot get at home. It may not be known to many of the profession who have not particularly interested themselves in this subject, that statistics prove that the clientele of houses of prostitution is made up far more of married than of unmarried men. It has frequently been argued that such houses are necessary for the sexual relief of single persons. But this is not the case. By far the greater number of those who patronize these houses are married men, whose wives for economical or other reasons refuse to submit to normal coitus. The dangers and results to the home and family need not be stressed when medical men are addressed.

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As a modification of complete self-control, we find a method, which is often employed by medical men, which consists in partial self-control. It is now alleged that the best time for conception in women with a 28-day cycle is from the tenth to the eighteenth day of the cycle, and the chances of impregnation are said to diminish the farther we get from that period, although many still think that no time is absolutely safe. With this in view many men withhold from connection until the supposedly most dangerous time is past. While this method from a physiological point of view is not as bad as complete self-control, it is far from being harmless. The trouble is that we are human beings and not lower animals. In the lower animal, as a rule, the female will not accept the male except during the period of rut, and conversely the male is not sexually excited by the female unless she is at that period. But in human beings the male is liable to be excited at any time, and not only on special occasions. Should he be sexually excited at the wrong time, and be compelled to control his desires, the effect on his sexual apparatus and his general nervous system must be detrimental. Moreover, as is well known, the sexual desire and inclination in the female is most marked after her periods,

and she is more likely to excite her partner just at this time. This has been most wisely arranged by nature, so as to make everything most favorable for the perpetuation of the species.

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A third method, and, indeed, one very widely employed, is that of coitus interruptus or withdrawal. This is a very popular method, as it requires no preparation and no device. Most people do not consider it harmful, as they can see no difference whether the seminal fluid is ejaculated into the vagina or into the bed.

As a matter of fact, this method of contraception is exceedingly harmful both to the male and the female. The female part of the question will not be discussed here.

The deleterious effect on the male consists in a non-completion or abnormal completion of the sexual act. I have fully discussed this question in many of my previous publications (1, 2, 3, 4, 5, 6, 7) and will, therefore, only mention the essential points here.

In normal coitus, the various organs entering into the act become turgescent during the preliminary sexual play. This turgescence is one of the main causes in bringing on and sustaining the erection. With the acme of the sexual act when normally performed, there comes the ejaculation, with a rapid disappearance of the turgescence, the parts resuming their normal condition. This condition of hyperemia affects not only the sexual organs themselves, but also the sexual centers. If the coital act is not normally performed, but interrupted by the removal of the organ from the vagina, the proper deturgescence does not occur, and the parts are left more or less congested. One act of withdrawal probably does little or no harm, but if the act is repeated week after week for many months or years, there comes a condition of chronic congestion just as we find in other parts of the body.

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Now, what is the clinical result of all these congestions? Exactly as found in any other organ of the body, under similar pathological conditions. A congested eye will blink at the slightest excess of light; a congested nose will sneeze at the slightest amount of dust in the atmosphere or the slightest amount of draught; a congested larynx will cough or lose its vocal power at the slightest amount of cold or use of the voice, etc., and so it is with the organs under consideration.

While in normal coitus it takes a certain amount of friction before orgasm and ejaculation are reached, in the congested condition of the parts the reflex centers are so irritable that the slightest friction of the penis is sufficient to cause orgasm and ejaculation. In extreme cases, ejaculation takes place even before the penis has entered the vagina (premature ejaculation), in others immediately or shortly after entrance (rapid ejaculation).

There is still another very important point in this connection to which I desire to call attention. The desire for sexual intercourse depends to a large extent upon the condition of distention of the seminal vesicles. This has been definitely demonstrated in frogs, in whom all desire for coitus disappears when the contents of the vesicles are squeezed out, but if they are then distended by the injection of plain water, desire immediately returns.

Now, even in normal coitus the seminal vesicles are not completely emptied, and in abnormal coitus, as in withdrawal, they remain much less depleted. Thus we will have, in these cases of abnormal coitus, a condition in which the vesicles become distended much sooner than after normal coitus, the desire for coitus returns much quicker, and coitus is indulged in more often, thus tending more and more to exhaust the already overtired sexual apparatus.

If, in spite of repeated warnings in the way of rapid and premature ejaculations, the patient continues in acts of withdrawal, we have again the same result as in other parts of the body. The centers, which have at first merely become overirritated, finally become exhausted and refuse to functionate at all, and we get, as a final stage, the clinical picture of complete impotence, in which neither erection nor ejaculation takes place, although the desire may still be present. The exhaustion of the centers is not entirely brought about by the frequent demands made upon them by coitus, spooning or other sexual excitements, but is largely due to the reflex stimuli arising from an ever-present congested prostate and prostatic urethra, as well as distended seminal vesicles, which are continuously bombarding the centers with reflex stimuli. Physiologically, the centers only receive peripheral reflex stimuli during the local congestion incident to coitus, but, when the parts are always in the state of chronic congestion as before described, the reflex stimuli received by the spinal centers are so numerous that exhaustion must take place.

Besides the above disadvantages, the entire nervous and psychic mechanism of coitus is disturbed by the act of withdrawal. For the act should be in the main a reflex one, and in withdrawal, during the entire act, the mind is continuously engaged in thinking of the exactly right moment to withdraw the organ.

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The last faulty method of contraception is the use of the condom. It must be said that this is the least harmful of all such methods. One of the disadvantages, especially with the use of the rubber condom, is the amount of friction sometimes necessary to put it on the organ. In sensitive patients, with tendency to rapid ejaculation, this friction may itself bring on ejaculation. All this is avoided with the use of the skin condoms. But with the use of any condom, however, the sensation is not so powerful or delicate as when the uncovered organ comes in contact with the vaginal mucus membrane. I have met several patients who were perfectly normal

Concluded on page 341)

Coronary Occlusion: Based on the Study of 165 Cases

• Tasker Howard, M.D., Brooklyn, New York

NOT long ago Dr. Henry F. Stoll of Hartford published a case history[1] in which the symptoms afforded a very accurate picture of coronary thrombosis. At the end of the story he disclosed the name of the patient and the date of his death. The patient was Gotama Buddha, and the date was four hundred years before Christ. Since that time many well known men have succumbed to the same disease. Doctors seem to be particularly subject to it, as pointed out by Osler many years ago, although he was content to call it angina pectoris. It is extraordinary that so many keen clinicians and pathologists overlooked the nature of coronary thrombosis so long, when one recalls the clean cut postmortem findings of a typical case. It was not until 1912 that Herrick[2] drew attention to the clinical characteristics of coronary thrombosis, and showed that it was not uncommon for patients to recover from it. Since that time a great deal has been learned about that condition, the chief contributors being Levine,[3] F. M. Smith,[4] Pardee,[5] Bedford and Parkinson[6] of England, Wearn,[7] and the Philadelphia group, Wolforth[8] and his collaborators.

This rather common and serious medical accident, coronary occlusion, can be brought about in two ways, by *embolism* or *thrombosis*.

The commonest cause of *coronary embolism* is probably:

1. The lodgement of a bit of vegetation from the valves in the presence of bacterial endocarditis. Sudden death is sometimes brought about in this manner.

2. A piece of clot from the left auricle, particularly in the presence of auricular fibrillation, is sometimes the offending object. Occasionally,

3. A clot from the systematic circulation finds its way through a patent foramen ovale—the so-called paradoxical embolism.

4. The sudden death that sometimes occurs during or shortly after a puncture of the pleural cavity is said to be due to air embolism in the coronary arteries. Finally,

5. I have three times seen coronary occlusion follow shortly after fracture of a bone. Under such circumstances the occurrence of fat embolization of the coronary arteries is strongly suggested. After a fracture it is well known that the lungs become more or less plugged with fat droplets from the injured bone and a sudden exertion may squeeze out of the lungs enough fat to act as a real obstruction in some of the smaller vessels elsewhere. This is a well recognized occurrence in the brain. Fatal coronary fat embolization has been described pathologically in the German literature.

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Coronary thrombosis occurred in men 127 times and in women 38 times in the group of 165 patients which go to make up this study. Of the men 12 occurred before the age of 40. No women under 40 were affected. Most of the men were in their 40's and 50's, only 25.6% occurring after the age of 60. On the other hand 54% of the women were over 60. It is evident then that women are seldom affected and when they are stricken it is not until they are pretty well along in life.

Coronary thrombosis is caused by the formation of a clot in a vessel which is probably always the seat of local disease. This is often a local manifestation of a generalized arteriosclerosis with or without hypertension. Twenty-eight per cent of the 165 cases presented a history of preexisting hypertension. It is evident from this figure that nearly three-fourths of the patients were not known to have had a previous hypertension. In such patients the disease is a localized atheroma in one or more branches of the coronary system. As to the *factors* that seem to *predispose* to this occurrence there should be mentioned as perhaps the commonest:

1. Long continued nervous strain, as seen in the life of a physician or a busy executive. Hurry and worry are the two elements of this sort of life that seem to be most active in bringing about coronary changes.

2. The greatly increased use of cigarettes that has come about since the World War may have something to do with the undoubted increasing prevalence of coronary disease.

3. Diabetes is said to be a common etiological factor. In my series it was present in 6% of the cases.

4. Obesity was even more prominent in my series, being present in 10.9% of the cases. About half of these individuals had elevated blood pressures.

5. Syphilis is occasionally the cause of coronary thrombosis, and the pathologist tells us that it is always operative by closing the mouth of one or another coronary artery, rather than by narrowing its lumen further down. Martland, the distinguished medical examiner in Newark, noted the fact that coronaries which have an anomolous point of origin, well above the sinusus of Valsalva, are the ones which are liable to such closure, as the syphilitic process seldom works down into the pockets behind the valve leaflets where the arteries ordinarily arise.

6. It is possible that trauma may sometimes bear some relation to coronary thrombosis. Three of the

Read before the Medical Society of the County of Kings, Friday, March 16, 1934.

Note: 49 of the 165 cases upon which this study is based are from the records of the Long Island College Hospital.

patients in my series told of severe blows over the precordium or fracture of ribs in the immediate neighborhood of the heart at some time previous to the coronary closure. One patient, indeed, began to have symptoms of angina pectoris immediately after a severe blow over the heart, received in an automobile accident, and died about three months later of a coronary occlusion. This patient had been suspected of having some coronary involvement even before the accident, however.

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In the presence of an atheromatous coronary artery, what is the occasion of the formation of a clot? The *inciting factor* may be merely progressive and extreme narrowing. More often it is some condition which very greatly slows down the coronary circulation through a lowering of the blood pressure and perhaps enfeebling of the cardiac action.

1. The commonest type of illness is an acute digestive upset. Coronary thrombosis frequently occurs after a large meal in a predisposed individual. The resulting indigestion may be operative by lowering the blood pressure or, as suggested by Luten,[9] by a reflex coronary spasm of vagal origin. It was Luten, too, who showed how coronary thrombosis might be initiated by the
2. Drinking of ice water or other cold fluid by a patient with a narrowed coronary vessel. The direct effect of the cold on the apex of the heart may very well bring about an arterial spasm in that organ. A well known Brooklyn surgeon developed a coronary thrombosis which ultimately killed him within ten minutes after drinking two glasses of iced milk.

Any debilitating illness, acute or chronic, may so lower the blood pressure as to bring about clotting. The same is true of

3. Over fatigue and of
4. Depressing emotion, as in connection with the death of a relative.

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The *symptoms of coronary occlusion* are the same whether caused by embolism or thrombosis. In thrombosis there is a preceding history of effort pain, i. e., angina pectoris, in many of the cases (26% of my series), but many times the episode comes out of a clear sky.

The most characteristic symptom is *pain,* which was present in 93.4% of my series and absent in 6.6%. The pain is typically felt in or *beneath the sternum* (82%) and characteristically radiates to the *left arm* (22.4%), *both arms* (18%), the *right arm* (3.6%), the *neck* (13.9%), the *jaw* (1.8%). It starts as a burning or boring sensation and tends to increase to great violence. There is often a great sense of *pressure* with the pain. The pain usually *lasts for hours* unless it is controlled by morphine. It is often said that this pain is very difficult to relieve and requires a great deal of morphine, but occasionally it is controlled with relative ease, and this point should not discredit the diagnosis of coronary occlusion if the case fits the picture in other respects. In 13.3% of my series the pain was felt in the *upper abdomen,* usually centrally.

A coronary occlusion is practically always accompanied by more or less *shock,* usually very severe. This is characterized by *pallor,* a tendency to *sweat,* a feeling of *faintness* with possible *loss of consciousness,* a *subnormal temperature, soft, full pulse,* and a *low blood pressure. Vomiting* at this stage is a common symptom, occurring in 28% of the cases. It is probably a reflex, taking its origin directly in the heart, just as vomiting is induced by the action of digitalis on the heart itself.

At the time of the occlusion some of the patients immediately begin to suffer from *shortness of breath,* and at times this symptom is very severe, sometimes being the only manifestation of coronary occlusion. Sixty-four or 38.7% complained of this symptom. Sixty-one and three-tenths per cent at the time of seizure obviously had no shortness of breath.

The physical examination of the patient at this stage shows practically nothing but what has been described. The heart is not enlarged and the sounds are usually quite normal. There may be moist râles at the lung bases.

After the subsidence of the shock, which may last several hours to a day, the patient usually is quite conscious that something is wrong in his chest. This sensation is apt to increase to very definite pain upon any exertion or change of posture. This feeling of soreness and easily aroused pain may last for days and weeks, or traces of it remain for much longer than that. After two or three days the patient typically develops some degree of *fever.* The greatest number in my series ran between 101 and 103, although there were as many as 22 who exceeded 103. There were only 5 who were recorded as having no fever at all. With this fever there is likely to be a somewhat disproportionate *elevation of the pulse* rate, and the development of some degree of leukocytosis. The average figure in my series was 13,800, the maximum being 33,000 and the minimum being 5,500. Sixteen per cent were recorded as having a leukocyte count below 8,000. It is customary to describe a *pericardial friction rub* as being heard at this stage. It was detected in only 10% of the cases in my series. A very important physical sign after the first two or three days is a gradual fading away of the first heart sound, until in some cases it can scarcely be heard.

The *electrocardiographic* findings so helpful in diagnosis present two phases, the first phase lasting a few hours to a number of days, the second phase remaining for weeks, months, or years. The first change noted consists in either an approximation in the first and third lead of the level line following the QRS complex, or a separation of these lines in the first and third lead, depending upon whether the lesion in the heart is on the posterior wall or on the anterior wall—the so-called displacement of the R-T segment. Later, with the development of the second phase, the R-T segment, which was originally elevated, whether it occurs in the first, second, or third lead, drops to a sharply inverted T wave, while the R-T segment, that was depressed, rises to an equally elevated T wave. More common, if less characteristic, is the gradual diminution of amplitude of all the waves, usually showing in two

of the leads rather more than all of them. In addition, there may be all kinds of variations, depending upon less specific changes in the heart walls.

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Of the *complications* to which these patients are subject the commonest and most characteristic is the occurrence of *emboli* from the inner surface of the cardiac infarct where the damaged endocardium becomes the seat of a mural thrombus. There were 17 instances of embolism recognized, 9 to the lungs (5 died), 3 to the brain (all died), 2 to the kidneys, 2 to the leg, and 1 to the chest wall. *Auricular fibrillation* occurred 10 times (7 died) and flutter once. There were five cases of *pneumonia* (2 died). *Heart block* occurred four times, once with the convulsions of Stokes-Adams syndrome. This patient was the only one of the four who died. *Bundle branch block* was seen twice. Other complications were *diabetic acidosis* 2, *gallstone colic* 2, *uremia* and *phlebitis* each 1. Two of the patients were later operated on for gallstone disease, coming through the operation very well.

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The *diagnosis* is usually reasonably clear. A sudden attack of pain in the middle of the chest radiating to one or both arms or the neck, tending to increase to great severity and to last for hours unless controlled by morphine, associated with evidence of shock and vomiting, and in the course of several days developing some degree of fever and leukocytosis, presents a picture which is quite characteristic. Variations in the severity, location, and duration in the pain, the lack of a typical drop in blood pressure, or any evidence of left heart weakness such as râles at the bases, or the failure to develop fever and leukocytosis, may make diagnosis difficult. There are border-land cases in which it is impossible to differentiate, and in these cases it seems to me to be of the utmost importance that they should be treated as though it were known that they had coronary occlusion. The penalty for not taking this precaution is often the death of the patient, which obviously is a far more serious matter to him than is confinement to bed for a month or so. The condition which is perhaps most often confused with coronary occlusion is severe angina pectoris without the actual formation of an infarct. The pain may last for several hours, although this is rare. Under these circumstances one is helped to a proper opinion by the fact that the blood pressure usually does not fall, and there is no subsequent fever or leukocytosis. Very important is the absence of the significant fading away of the first sound of the heart over the course of the first few days, and finally, the electrocardiogram usually will distinguish sharply between these two conditions. When the pain begins in the epigastrium and is associated with vomiting and collapse, it is sometimes very difficult to distinguish coronary occlusion from some such surgical emergency as perforated ulcer, acute pancreatitis, or acute gall-bladder pathology. Here a definite story of preexisting effort pain, that is, angina pectoris, or of the typical hunger pain of ulcer may help. An electrocardiogram again is of vital importance in such an emergency. If one can await the appearance of the pericardial friction rub or of the characteristic softened first sound this may decide the question.

There is another diagnostic problem that we not infrequently encounter, and that is the identification of a condition in which a patient has previously suffered a coronary occlusion and recovered or partially recovered without knowing that this had occurred. The symptoms under these circumstances are sometimes rather puzzling. The patient may present a curious type of heart pain which is rather typically located beneath the upper sternum, but which does not necessarily bear the direct relationship to effort that angina pectoris does. Angina occurs most readily early in the day, shortly after breakfast. The cardiac discomfort of the postinfarctive state is most apt to come on toward night when the patient is tired. It usually is accompanied by a sense of pressure, but the pressure is not from the outside in, but feels like an expanding mass beneath the sternum. It is usually readily controlled by lying down, but is not affected by nitroglycerin. Patients in this condition not infrequently develop congestive heart failure as the result of ill-advised physical activity. On examination one is unable to find any evidence of valvular heart disease, there is no hypertension or history of hypertension, and one may be puzzled to account for the occurrence of heart failure under these circumstances. The heart sounds are likely to be decidedly weak, the first sound being characteristically shortened. The shadows seen on the fluoroscope are rather characteristic, there being a decidedly diminished movement of the cardiac margins, particularly down toward the apex, where they may remain almost stationary. The electrocardiogram may show significant changes or it may show little or nothing of note. The one most characteristic feature of such a picture is the fact that the patient will usually be able to tell you to a day when his illness began. He will say that until a certain date he was perfectly well, or perhaps that he had suffered from more or less chest discomfort on effort previous to this date, when he was taken acutely ill with what is usually called indigestion or gastritis, and which on close questioning turns out to possess all the earmarks of an acute coronary occlusion.

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TREATMENT: On making the diagnosis of acute coronary occlusion the immediate indication is to relieve the pain with morphine, as the pain is in itself the direct cause of the shock which is one of the immediate perils, and which tends to extend the clot by still further reducing the vigor of the coronary circulation. At least a quarter of a grain should be given immediately, and if this does not take effect at once it should be repeated. Sometimes as much as one grain of morphine is required before the patient is reasonably comfortable. It is well to maintain a mild degree of narcosis thereafter, even in the absence of spontaneous pain, by the exhibi-

tion of smaller doses of morphine at regular intervals. Usually this can be accomplished by 1/10 of a grain every three or four hours, turning to larger doses if there is much discomfort. The shock usually calls for such supplementary treatment as hot water bags to the feet, and a hot water bag over the precordium is a comfort. If any medication is used for the shock itself caffeine is probably the best. Adrenalin should be avoided. Digitalis is almost never needed at first, and not very often later. With the heart muscle already seriously damaged, it is usually well to avoid adding the influence of a myocardial poison, unless a specific indication for this action is present, this indication being a failing heart, with rapid rate, particularly in the presence of auricular fibrillation. Under these conditions digitalis may be life saving. A reasonably low blood pressure is probably an advantage rather than the opposite throughout the course of the illness, since it demands less of the crippled heart.

Through the early stages of the infarct, or later with the development of softening and myocardial edema, there may be an element of general anoxemia which adds to the difficulties of the heart, already deprived of part of its blood supply. This fact has been particularly emphasized by Dr. Barach and Dr. Robert L. Levy,[10] who are strong advocates of the use of oxygen on the slightest suspicion of cyanosis or dyspnea. As they have pointed out, it may help to control the pain. It certainly seems a rational procedure, and on occasion I have found it of decided help. It may be administered by the oxygen tent or the nasal catheter.

From the start absolute confinement to bed is imperative. Upon the treatment of coronary occlusion depends the outcome, perhaps more surely than in most medical conditions. The patients with this disorder who fail to take the proper amount of absolute rest, whether through failure of any medical advice, through failure of diagnosis, through the easy going compliance of the medical adviser, or through obstinacy, no doubt live a very much shorter time than those who follow the safer path. This is the experience of every clinician who has had much to do with these patients. It is perhaps significant that comparing the mortality of the hospital series with my private and consultant work that 36% of the deaths in the hospital group occurred from one to six months after the occlusion—this because so many of them had only come to the hospital after days or weeks of trying to fight it out without staying in bed, while none of the deaths in my own series occurred during this period so far as I am aware. If they survived the first month they carried on until another occlusion occurred, usually six months or more after the first.

The most dangerous time for the patient to be up and about or to undertake any activity whatsoever is about the fifth to the twenty-first day, during which period there is so much softening of the infarcted area that it is in danger of bursting. Many patients stand considerable moving about the first day or so with surprising lack of bad results. The length of time for which it is necessary for the patient to remain in the recumbent position depends somewhat on the severity of the attack and the patient's reaction to it. He should never be allowed to sit up in bed inside of four weeks in mild cases, the average being about six weeks. Toward the end of this period it is well to start with mild bed calisthenics, perhaps using the resistance movements if a trained masseur is available. Massage itself is perhaps of some benefit in maintaining the tone of the muscles, but it should be administered very carefully, avoiding any pressure on the abdomen and avoiding the usual effleurage of the limbs, as this maneuver throws the blood too rapidly into the heart. Massage, if given at all, should be confined to the muscles of the back, limbs and neck, with passive movement of the joints, and ultimately very carefully controlled resistance movements should be employed.

To go back to the early days of the illness, the *diet* at the start will probably be decidedly limited by the patient's disinclination to take much of anything. A small amount of liquid nourishment is usually all that is required the first twenty-four hours or so. Thereafter the food should be relatively small in bulk and high in carbohydrates. For this purpose cereals and soft puddings are the most appropriate. The diet may be varied as time goes on by the addition of eggs, vegetables, fruit, and ultimately a little meat by the time the patient is quite afebrile and perhaps growing hungry. During the stage of softening, that is, from about the fifth to the twenty-first day, the heart is critically damaged and a plentiful supply of carbohydrate is of great service to it. Sometimes it is helpful, as suggested by Marvin,[11] to administer glucose intravenously daily during this period. I frequently turn to this if the patient is threatened with congestive heart failure. Marvin uses a 50% solution, administering from 10 to 50 cc. a day. Personally, I have felt more comfortable keeping the dose below 20 cc. A large amount of this hypertonic solution increases the blood volume rather rapidly through its osmotic effect and might add seriously to the heart's load.

It is important from the start to insure relatively easy bowel movements. The straining of constipation is dangerous. It is well, therefore, to administer mineral oil regularly from the first day on. A low enema may be necessary in addition. Strongly acting purgatives are distinctly contra-indicated.

The question of the use of coronary dilators seems important from the theoretical standpoint. I usually give aminophyllin or one of the theobromine salts if the patient's stomach will tolerate it, hoping that the development of a collateral circulation will be encouraged in this manner. However. I have many times had to give them up because of gastric irritation, and I can say that I have seen no particular difference between the course of those who have been able to take these drugs and the course of those who could not.

To carry on with the treatment after the patient begins to get up: the time out of bed is very slowly increased so that by the end of 8 to 12 weeks he is up and about the room off and on throughout the day. It is well for him to rest immediately after meals for a long period and it is well for him to remember that his heart is most vulnerable early in the morning, so that when activity is commenced it should not for a long time be begun too soon

after breakfast. By the end of 8 to 12 weeks the patient should be able, as a rule, to negotiate stairs, in mild cases perhaps even before this time. Then in mild weather he may begin at this period to go outdoors, either to sit or wander about a little. If this period comes during the winter months it is a real advantage to ship him south, where he can avoid the cardiac strain of winds and cold weather and can be outdoors more of the time. The problem of resuming work depends not only on the condition of the patient, but upon the conditions of his occupation. He is very lucky if he is able to start in doing part time work. The period at which this is allowable varies greatly with the individual as well as the job. If it can be postponed for six months it is usually best, and after a severe attack a year off is none too much. The outlook for these patients is perhaps better on the whole than most of our figures imply, but at best, congestive heart failure and recurrences of the occlusion are so frequent that there can be no doubt about the wisdom of a patient who has once suffered this accident planning the rest of his life on a scale of decidedly reduced activities. It may be recalled that Conner and Holt[12] found that of 287 cases 16.2% died in the first attack (24.24% of my series died in the first attack) while of those who survived 75% were in good health at the end of one year, 56% at the end of two years, 21% at the end of five years, and 3.4% at the end of ten years. It seems not at all improbable that this last group could be materially enlarged if patients could be persuaded to carry on a reasonable degree of activity only. There are those who are never willing to attempt limitations, and these are the ones who, in my experience, succumb the quickest. If an individual will squarely face his limitations, learn them, and then live within them, forgetting that there are limitations, there is no reason why he may not lead a contented and reasonably useful life. This involves relatively short hours of work if possible, avoiding hurry and worry, a noontime rest to break the day in two, and a long vacation every year if possible. Green and Burton[13] analyzed the deaths of a hundred such patients with particular reference to the immediate cause of death. They found that practically all of them followed unusual activities which could very well have been avoided. These included:

1. Prolonged physical exercise, 44.
2. Journeys particularly associated with loss of rest and hurried preparations, 33.
3. Violent physical strain, 24.
4. Over-eating, 16.
5. Emotional shocks, 13.
6. Acute infections, 6.
7. Over-drinking, 5.
8. Operations, 4.
9. Sexual excess, 1.

This very instructive analysis emphasizes the factors that are of peculiar danger to such patients and advice based upon this tabulated experience covers the vital points. The physician's part is to familiarize himself with the details of the patient's life and to keep in close touch with him until he has satisfactorily stabilized his activities at a level requiring no more than a safe expenditure of energy. Some have to be reminded at fairly frequent intervals as to what is safe and what is not. Others, having learned their lesson, can be trusted to carry on. All should be urged to report for a check-up periodically.

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Effects of Some Faulty Contraceptive Methods on the Male

(Concluded from page 336)

sexually, but on account of the diminished sensation could not come to the point of ejaculation, no matter how hard they tried, although they maintained perfect erections. This has been noticed in a few of my sterility cases, where a condom specimen was desirable. Many women also complain of the diminished sensation when the husband employs this method. As before said, the female part of the question is not within the scope of this paper, but I merely mention this because diminished sensation and lack of orgasm in the female detract greatly from the pleasure received by the male during the act of coitus.

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I have not considered it necessary to include herein such radical procedures as tying off the vasa, etc., as these procedures are really sterilizing methods and not, strictly speaking, contraceptive methods.

I would also emphasize the fact that none of the methods herein mentioned are absolutely safe, except, of course, absolute self-control.

In conclusion, it should be noted that any form of contraception employed by the male falls far short of normal sexual intercourse.

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The Non-Surgical "Acute Abdomen"

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THE term "acute abdomen" is ordinarily applied to an acute abdominal condition requiring some form of immediate surgical interference to save the life of the individual or to alleviate his suffering. There are numerous non-surgical conditions, however, which present a complex symptomatology so closely resembling the acute surgical abdomen that we must be on the lookout lest we expose an already seriously sick patient to the added risk of surgery. This paper is an attempt to summarize the more important of these conditions. The material is drawn from actual clinical experiences, and from reported cases.

For convenience of description we shall classify these disease states into the following six groups:

1. Affections of the thoracic organs.
2. Disturbances of the nervous system affecting the abdomen and its contents.
3. Rheumatism, allergy and acute infectious diseases.
4. Arteriosclerosis of the abdominal vessels.
5. Displacements and irritative conditions of the abdominal organs.
6. Intoxications and constitutional diseases.

Affections of the Thoracic Organs

The more common conditions of the chest organs that may occasionally simulate the acute surgical abdomen are coronary thrombosis, mesenteric embolization from mural thrombi in the heart, spontaneous pneumothorax and pleuropneumonias affecting the diaphragmatic surfaces.

Coronary Thrombosis. Although the usual cases of coronary thrombosis can be easily recognized clinically, we frequently encounter cases where its differentiation from the acute surgical abdomen demands great skill and the help of the electrocardiogram. The following are examples:

A male, 43 years of age, complained of occasional epigastric distress of two years duration. One day, while at work, he was suddenly seized with excruciating pain in the epigastrium, vomiting, collapse and cold perspiration. This was followed by marked upper abdominal tenderness, especially over the right quadrant, with considerable rigidity. His family physician, as well as the surgeon called in consultation, suspected suppurative cholecystitis, with possible rupture of the gall-bladder or ruptured gastroduodenal ulcer. Because his heart sounds were poor a cardiac consultation was ordered. Examination revealed a patient in severe shock. His color was ashen, and the blood pressure was systolic 80, diastolic 60. The heart was enlarged to the right, the rate was 110 beats per minute and there was a definite presystolic gallop rhythm with very weak sounds. In spite of some right upper abdominal rigidity, the liver could be palpated and was found to be enlarged and tender. A diagnosis was made of acute coronary occlusion affecting mainly the circulation of the right ventricle and resulting in right ventricular failure. The upper abdominal pain, tenderness and rigidity were attributed to sudden stretching of Glisson's capsule of the liver due to acute engorgement of that organ. The electrocardiogram and subsequent course proved the diagnosis. He developed a diffuse pericardial friction rub the following day, characteristic of the condition. He made an uneventful recovery.

Some years ago we saw a similar patient who underwent an exploratory laparotomy. The operation and the subsequent autopsy findings showed the seat of the trouble to be in the heart.

The following case illustrates the importance of an electrocardiographic check-up even in an apparent absence of abnormal cardiac signs.

A female, 50 years old, was recently admitted to the surgical service of the Coney Island Hospital, with an attack of severe pain in the epigastrium, vomiting and collapse. The attack came on suddenly on the morning of admission. There was a history of recurring epigastric burning pain for two days before and in milder form for several years. Her heart sounds were recorded to be of good quality, rhythm regular and no murmurs were present. The lungs were negative. The abdomen showed epigastric tenderness. A possibility of ruptured gastric ulcer was considered. The electrocardiogram, however, showed typical coronary occlusion R-T and S-T segment deviations and T waves. She was accordingly transferred to the medical service. The diagnosis was proved by the subsequent course, and gastroduodenal ulcer was ruled out by x-ray and the absence of occult blood in the stools. She was finally discharged from the hospital improved.

Mesenteric Embolization. In the course of coronary thrombosis with infarction of the ventricular musculature extending to the endocardial surface, mural thrombi may form at the site of the endocardial involvement. Also, in the course of auricular fibrillation or flutter, with or without cardiac failure, as well as in mitral stenosis even with a normal sinus rhythm, mural thrombi may form in the auricles. Any of these thrombi may result in embolization. Mural thrombi in the right heart may result in pulmonary embolization. Thrombi in the left heart may embolize anywhere in the systemic arteries. Embolization to the abdominal vessels will often give a clinical picture not unlike an acute surgical abdomen. If a small vessel is closed off the embolus may absorb, leaving no trace, as exemplified by the following case:

Some years ago a woman, 42 years of age, was admitted to the Greenpoint Hospital with a diagnosis of old mitral stenosis and auricular fibrillation. One day she was suddenly seized with severe abdominal cramps followed by right lower quadrant pain and vomiting. There was marked tenderness and rigidity over McBurney's point, with fever and

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leukocytosis. A diagnosis of acute appendicitis was made. At operation the appendix and all other organs were found to be normal. There was some distention of a portion of the intestines. She made an uneventful recovery.

An embolus may lodge in a vessel supplying a solid abdominal organ. Embolization to the kidney may be symptomless. That to the spleen, if affecting the upper pole, may give symptoms of an acute abdomen, as shown by the following case:

A male, 24 years old, was recently admitted to the surgical service of the Coney Island Hospital with an attack of severe pain, in the left upper quadrant of the abdomen, and vomiting. The pain radiated to the left flank and left lower ribs and was more severe on deep respiration. He was acutely ill and cyanotic. The respiratory rate was 45 per minute. The lungs were negative except for congestive râles at the bases. The heart was enlarged and there was a total irregularity with a rapid ventricular rate. The sounds were poor and there was a faint systolic murmur at the apex. The liver was enlarged and tender. The temperature ranged from 99 to 102 F. and there was a moderate leukocytosis. Exploratory laparotomy was considered, but not resorted to because of poor operative risk, and he was transferred to the medical service. Our diagnosis was cardiac dilatation, possible mitral pathology of rheumatic origin, auricular fibrillation, and mural thrombi in the auricles with embolization of a splenic vessel, resulting in splenic infarction and associated perisplenitis, accounting for the acute upper left abdominal pain. Liver engorgement secondary to congestive failure was considered to be an associated cause of the continuous upper abdominal pain. He died and the autopsy proved the diagnosis, but there was no mitral pathology.

Before leaving this subject mention must be made of the rare form of paradoxical embolization. This may come from venous thrombosis anywhere and because of a patency of the interventricular septum, foramen ovale or ductus arteriosis may pass directly to the peripheral circulation.

Spontaneous Pneumothorax may occasionally give symptoms suggestive of acute surgical abdominal disease. Milhorat (1) reported a case of spontaneous hemopneumothorax with severe mid-epigastric pain radiating to the entire abdomen, diffuse rigidity and direct and rebound tenderness over McBurney's point. He also quoted a similar case reported by Hurthol.

Pleuropneumonias. Pleurisy and especially pneumonia involving the diaphragmatic portion of the lungs may give typical symptoms of an acute surgical abdomen. Due to the synaptic connections of the phrenic nerve in the spinal cord with the lower cervical nerves, trapezius pain and tenderness may occur. If the right lung is involved the clinical picture may simulate acute gall-bladder pathology or, in children, acute appendicitis. The following is an example:

A female, 46 years ald, who was subject to recurrent attacks of gall-stone colic, was suddenly seized with a chill and severe pain in the right upper quadrant of the abdomen, radiating to the right shoulder and neck. Fever developed, and the right upper abdomen became rigid and tender. A diagnosis of acute cholecystitis was made and operation was considered. The following morning she showed definite signs of consolidation of the lower lobe of the right lung. She ran a typical course of lobar pneumonia and made an uneventful recovery.

Disturbances of the Nervous System Affecting The Abdomen and Its Contents

The important affections in this classification, from our viewpoint, are the visceral crises of tabes, herpes zoster, intercostal neuralgia, lead colic, spinal disease, psychoneuroses and hysteria.

Visceral Crises of Tabes are characterized by severe and recurring abdominal pain and vomiting which may resemble attacks of intestinal obstruction, renal or biliary colic, or any other acute abdominal condition. If other tabetic manifestations are present, its differentiation from the acute surgical abdomen is easy. In some cases the visceral crises may be the only manifestations of the disease, early, if only the upper dorsal neurons are involved. Here the differential diagnosis is difficult. The following is an example:

A male, 45 years old, was admitted to the surgical service of the Coney Island Hospital with an attack of severe, agonizing pain in the lower spinal region, radiating across the upper abdomen, associated with a cold perspiration. There was considerable distention and rigidity of the abdominal wall but no tenderness. Aside from "electric-like" pains in the legs and arms that occurred two years before and never recurred again, there was nothing to suggest the presence of tabes. He denied lues. The blood Wassermann was negative. His pupils were equal, normal in size and reacted to light and accommodation. His reflexes were active and there was no Romberg sign or ataxia. An exploratory laparotomy showed nothing abnormal in the abdominal organs.

We have recently seen a case of tabes showing all the earmarks of the disease who presented marked rectal tenesmus. He went through a painful and unnecessary operation for hemorrhoids, against our advice, in the hope of getting relief from this tenesmus. No such relief was, of course, obtained.

Herpes Zoster. Dorsal posterior root ganglion involvement may result in severe shooting pain in the kidney region radiating to the upper abdomen. We have recently seen a case which was mistaken for renal colic until the eruption appeared. Some of these cases may go through painful cystoscopic and pyelographic examinations unnecessarily. The diagnosis should be easily made even before the eruption appears, by the spasmatic sharp shooting pain and skin sensitivity along the course of a nerve, together with malaise, loss of appetite and low grade fever.

Intercostal Neuralgia may in rare cases simulate acute abdominal disease, as in the case reported by Carnett (2).

Lead Colic is not as frequent now as in the past. The history of exposure and a careful physical and laboratory check-up make its recognition easy. The presence of a "lead line" (making sure, however, to rule out that caused by bismuth), the "stippling" of red cells, the characteristic palsies, if present, and the presence of lead in the urine and feces are diagnostic.

Nerve Pressure: Pressure on the posterior nerve roots by spinal tumors, spinal column disease, such as spondylitis deformans, the various forms of spinal arthritides and spinal caries, as well as leukemic and cancerous infiltrations, may give acute abdominal symptoms. Likewise, leukemic infiltration of some abdominal organs may at times occur rapidly, producing similar symptoms.

Psychoneuroses and Hysteria: We occasionally see cases showing the symptom complex resembling the acute surgical abdomen caused by psychogenic factors. The differentiation can be made by the absence of fever and leukocytic reaction and the presence of hysterical and psychoneurotic manifestations. Christianson and Bargent (3) reported five cases of abdominal distention simulating intestinal obstruction, apparently of neurogenic origin.

Rheumatism, Allergy and Acute Infectious Diseases

Among the numerous manifestations of these conditions, abdominal symptoms resembling the acute surgical abdomen are very frequent. Many unnecessary and dangerous operations have been performed because of errors in diagnosis.

Rheumatism. A complete discussion of the various manifestations of rheumatism with clinical examples will be found in a previous paper (4). Suffice it to say here, that the disease, like tuberculosis or syphilis, affects the perivascular areas in various parts of the body, producing protean clinical manifestations depending upon the predominance of involvement in a given portion of the body. Abdominal involvement has resulted in symptoms closely resembling the acute surgical abdomen.

Allergy. Allergy likewise may show similar reactions, of which the following will serve as an example:

A boy, 13 years old, was admitted to the Coney Island Hospital three years ago with severe vomiting, general abdominal cramps and localized pain and rigidity at McBurney's point. The temperature was about 103, pulse 120 and there was a leukocytic reaction. Operation was considered. It was noticed, however, that he developed painful swellings of the lymph glands in the inguinal and axillary regions. On careful history and physical examination we elicited the fact that he had been given tetanus antitoxin following an injury about five days before and there was some hyperemia at the site of injection. Allergy was considered. The following day a diffuse urticarial rash developed about the body. He made an uneventful recovery.

The subject of food allergy and abdominal symptoms was fully covered by Rowe (5). His personal observations and his quotations from other writers contain abundant illustrations of acute abdominal attacks resembling acute appendicitis, cholecystitis and cholelithiasis, peptic ulcer with possible perforation, and intestinal obstruction. Symptoms of the latter may be caused by angioneurotic edema, which is an allergic manifestation. Henoch's purpura is likewise an allergic manifestation which is associated with abdominal symptoms. Osler stresses the frequency of erythemata with purpura and abdominal pain.

That allergy may give all these symptom complexes is understood when we realize the tissue reactions caused by the condition, consisting of edema of the mucous membrane and smooth muscle spasm.

Acute Infectious Diseases will often give abdominal symptoms not unlike the acute surgical abdomen. We have recently seen a girl, 12 years of age, who was about to be operated on for appendicitis. Attention to an upper respiratory infection which she at the same time showed cleared up all abdominal symptoms.

Pneumonia and pleurisy have already been discussed. Abdominal influenza, early typhoid fever and tuberculous peritonitis have been repeatedly mistaken for the acute surgical abdomen. Malaria will in some cases give symptoms not unlike biliary infection, appendicitis, urinary sepsis and the complications of typhoid fever and dysentery. Taylor (6) gives a complete account of this condition. Finney (7) cites, among other conditions, instances of measles, osteomyelitis of the upper portion of the femur and ilium, and a psoas abscess in children, where operations for appendicitis were performed erroneously.

Acute non-suppurative hepatitis may likewise be mentioned. This condition may occur with or without congestive heart failure and may result from infections or intoxications. Lastly, inflamed iliac lymph glands may simulate a surgical condition.

Arteriosclerosis of the Abdominal Vessels

Excluding embolization, which has already been discussed and which may occur at any age and without arteriosclerosis, there are two important abdominal vascular conditions which enter our present discussion—vascular thrombosis and arterial spasm. Both of these conditions occur only in the presence of vascular sclerosis.

Arterial thrombosis affecting a main mesenteric vessel such as the superior mesenteric artery is a surgical condition. The intestinal gangrene which supervenes requires immediate surgical interference. Thrombosis affecting smaller branches of the mesenteric vessels or vessels leading to non-hollow viscera, such as the spleen or pancreas, may simulate the acute abdomen.

Unfortunately our clinical knowledge of the condition is meager. Many of the cases clear up and the underlying pathology is unknown. The exceptional cases that die and find their way to the autopsy table are, in most instances, not reported. An interesting, although theoretical, discussion on the subject is to be found in the paper of Conner (8).

Vascular Spasm. That severe pain may result from spasm of abdominal vessels is debatable. The term abdominal angina is perhaps an expression of our ignorance of the underlying cause of a severe attack of abdominal pain in the elderly individual. Some of these cases may really be those of vascular thrombosis involving small branches of the abdominal vessels. We see occasionally, however, a case exhibiting this phenomenon. Riesman (9) reported an instance of an elderly man who showed periods of intermittent claudication of the lower extremities, then angina pectoris which was soon followed by

sharp pain in the mid-epigastrium, attributed by him to spasm of the branches of the celiac axis. Later he showed transient visual disturbances in one eye attributed to retinal artery spasm.

Mention may be made of the rare condition of aneurysm of the abdominal aorta or iliac artery or of a dissecting aneurysm of the thoracic aorta which may give severe abdominal attacks of pain radiating to the thighs, shock and collapse.

Displacements and Irritative Conditions of Some of the Abdominal Organs

The more common conditions belonging here are twisting of a renal pedicle, caused by a movable kidney, inflammations of the urinary tract and gastro-intestinal irritations caused by indiscretion in diet and parasitic infestations.

Twisting of a Renal Pedicle may rarely occur with a movable kidney. It may result in blocking of the renal vein, causing acute congestion of the kidney or kinking of the ureter. The latter may cause intermittent hydronephrosis or pyonephrosis if associated with infection. The term "Dietl's Crisis" is given to this condition. It is characterized by severe acute upper abdominal pain, radiating to the back and sometimes down the thigh and scrotum or labia, associated with nausea, vomiting and collapse. If infection is present, a high temperature and a leukocytic reaction may occur. The symptoms subside spontaneously with the untwisting of the pedicle.

Urinary Tract Inflammations such as pyelitis, pyelonephritis and acute ureteritis following calculous irritation, or developed as a result of colon bacilluria, may result in acute pain, tenderness and rigidity along the affected ureter which may closely resemble appendicitis. There are many recorded cases of operations for supposed appendicitis where the above conditions were the causes of symptoms.
Gastro-intestinal Manifestations such as pylorospasm, intestinal colic and mucous colitis produced by reflex disturbances, indiscretions in diet and infections may occasionally simulate the acute surgical abdomen. The differentiation, however, is easy. Parasitic infestation of the intestines will often give symptoms suggestive of appendicitis or other acute abdominal conditions. We have recently seen a case of pinworm infestation which was operated on for appendicitis. The presence of eosinophilia and a careful repeated search for the parasites or their ova in the stools will help in the diagnosis.

Intoxications and Constitutional Diseases

The more important conditions under this heading are diabetic ketosis, uremia, sickle-cell anemia and alcoholism.

Diabetic Ketosis. Joslin (10) cites four cases of impending diabetic coma where surgical consultation was ordered because of abdominal tenderness and muscle spasm, abdominal pain, nausea and vomiting, leukocytosis and fever. One case was operated on with negative findings. Another case was diagnosed acute cholecystitis where the symptoms entirely disappeared with the relief of the ketosis.
Uremia may occasionally give symptoms resembling intestinal obstruction. Romanis (11) cited instances of abdominal distention and vague cramp-like pains on this basis. In the wards of the Coney Island Hospital we occasionally observe such an instance.
Sickle-Cell Anemia is mentioned by Leivy and Schnabel (12) as a cause of epigastric and left hypochondriac pain, vomiting, tenderness, abdominal rigidity, fever and leukocytosis. The symptoms may be so marked as to simulate gallstone colic, appendicitis or a ruptured viscus.
Alcoholic Intoxication may give acute abdominal symptoms of the surgical type. Brams and Vaughn (13) report such cases. One case was diagnosed as empyema of the gall-bladder with complicating bronchopneumonia. The autopsy showed acute toxic hepatitis. All the reported cases showed shock, leukocytosis, abdominal pain and rigidity.

The gastric analyses in these cases showed besides methyl alcohol, some phenol, lysol, mercuric chloride, fusel oil and other impurities used as denaturing agents during the prohibition days. Perhaps the repeal of prohibition will do away with this group, and will partly relieve the already overburdened medical mind from more speculative possibilities.

Differential Diagnosis

In our differential diagnosis the fact to be established first is whether we are dealing with a surgical or medical abdominal condition. A surgical condition demands, of course, urgent surgical interference. A medical condition calls for conservative methods of treatment. The type of medical abdomen with which we are dealing is of no immediate importance. There is usually ample time for careful differential study. If the medical condition proves fatal, we at least avoid the unpleasant thought that surgical interference might have been the possible cause of death.

The surgical conditions of the abdomen may be divided into hemorrhage, perforation, inflammation and obstruction. Each group has its special characteristics and must be differentiated from the medical groups showing similar features.
Hemorrhage, such as from ruptured ectopic pregnancy, is characterized by excruciating pain and shock with its cold clammy perspiration, rapid and thready pulse, fall in blood pressure, pallor, restlessness and diffuse abdominal tenderness with little or no rigidity. The medical conditions that may present this picture are coronary thrombosis and spontaneous pneumothorax. The age and sex of the individual, a careful cardiac examination and an electrocardiographic check-up will help us rule out the former, while a careful lung examination will rule out the latter.
Perforation, such as ruptured gastric ulcer, for example, is likewise characterized by suddenness of onset, shock, excruciating pain and collapse. The board-like rigidity and marked tenderness characteristic of this condition, however, will exclude coronary thrombosis, embolization, spontaneous pneumothorax, tabetic crises, lead colic, vascular spasm, pylorospasm, and colonospasm, all of which may have some similarities to the condition, but in all of which involuntary rigidity is either absent or is slight, and so is tenderness. Many of these con-

ditions are rather relieved by pressure. Likewise the leukocyte count, which is very high in perforation, is of help.

Inflammations. The surgical inflammatory conditions of the abdomen such as appendicitis, cholecystitis, cholangitis, salpingitis and localized or diffuse peritonitis all may have in common an initial colicky pain followed by slowly rising temperature and pulse rate with definite tenderness and rigidity. The pain is at times burning and is increased by movement, coughing and deep breathing. The usual medical conditions to be differentiated here are abdominal rheumatism, allergy, acute infectious diseases, urinary tract inflammations, diabetic ketosis, sickle-cell anemia and alcoholic intoxication.

Rheumatism may be differentiated by other rheumatic manifestations, if present, such as carditis, arthritis, rheumatic nodules, upper respiratory infections, etc.

Allergy may be excluded by a personal or family history of asthma, hay fever, urticaria, angioneurotic edema and so on. If leukocytosis is present, the polymorphonuclear count is usually less than 80% in allergic cases, while in abdominal infections it is usually much above 80%.

Of the acute infectious diseases, pneumonia and upper respiratory infections should be easily discovered by physical examination. In pneumonia, if the pain is projected to the abdomen, there is no really deep involuntary rigidity and the respiratory rate will be high with possible grunting respiration.

Typhoid fever may be suspected from a history of several days of headache and malaise preceding the onset of abdominal symptoms, leukopenia instead of leukocytosis and relatively slow pulse rate with a high temperature.

Abdominal malaria is to be suspected if the patient recently came from a malarial district and, according to Rowe (5), if blood is found in the gastric contents. Absence of involuntary rigidity, the characteristic temperature and the therapeutic test of quinine will help in the diagnosis.

Abdominal influenza is characterized by colicky pain, absence of definite rigidity, and the temperature is usually much too high for an acute surgical abdomen.

Diabetic ketosis may be detected by blood chemistry, urinalysis and the acetone odor from the breath.

Sickle-cell anemia occurs mainly in the Negro race and a blood examination will at once determine the diagnosis. Likewise the presence of pain in the extremities in association with abdominal pain is characteristic.

Alcoholic intoxication may be detected by the breath and the history of alcoholism.

Obstruction. Intestinal obstruction has its characteristics of early intermittent colicky pain with the gradual shortening of the interval of freedom from pain. There is progressive and persistent vomiting which later becomes projectile and fecal. Obstipation and early distention, but no rigidity, are characteristic. Peristaltic waves may be seen and heard. The medical conditions that may simulate obstruction are tabetic crises, psychoneuroses, hysteria and uremia. The differentiation may be made by the atypical character of the abdominal symptoms and by the other signs associated with these conditions. A flat x-ray plate of the abdomen will also help to rule out intestinal obstruction.

Conclusions

Although the conditions resembling the acute surgical abdomen are many and varied, if we bear in mind the various possibilities and carefully analyze the symptomatology in each case, a correct diagnosis should be arrived at in most instances. If we are to profit by our experiences, we must bear those experiences in mind. If we are to avoid errors in diagnosis, we must have a good knowledge of the objective and subjective symptomatology in a given case. Surgery may be life-saving where it is indicated, but unnecessary surgery a lds unnecessary danger.

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Diabetic Cataract: Incidence and Morphology in One Hundred and Twenty-Six Young Diabetic Patients

C. S. O'Brien, J. M. Molsberry and J. H. Allen, Iowa City (*Journal A. M. A.*, Sept. 22, 1934), studied the crystalline lenses in young diabetic subjects in order to determine the incidence and morphology of cataracts in such patients. The report is founded on repeated detailed examinations of the lenses in 126 diabetic patients up to and including the age of 33 years. Most of the patients, when first seen, had been on treatment for some time. Practically every lens in the entire series showed occasional small punctuate congenital opacities and there were a few in which coronary cataract was present; the diagnosis in such cases was usually not difficult, but in those lenses in which doubt existed the changes were classified as congenital. The incidence of cataract was 16 per cent. The morphology of these cataracts differed, but two common types of lens changes were encountered: 1. Snowflake or snowstorm cataract. This type was found in 60 per cent of cases and appeared as innumerable small grayish white flaky opacities in the anterior and posterior cortical areas. In a routine study of several hundred cataracts it was seen, with one exception, only in persons with diabetes. 2. Posterior subcapsular cataract. This type was found in 70 per cent of cases as a saucer-like posterior subcapsular opacity composed of confluent gray granules and oftentimes iridescent crystals. It is not peculiar to diabetic cataract, since similar changes may follow ocular injury or disease, and it has been noted in senile cataract.

Dinitrophenol—A Warning

• Armand R. Vanore, M.D., Brooklyn, N. Y.

THE surgeon at times is met with the problem of the elective case which is too obese to make a fair surgical risk and to insure a fair operative outcome. Because of this, the surgeon or the physician may be tempted to use methods of reduction which although attractive, may prove to be a source of regret later. This also applies to the non-surgical case, which seeks reduction either for cosmetic reasons or because of a particular symptom complex.

The periodicals of the American Medical Association have carried reports, by Cutting and Tainter and others, of the beneficial influence of dinitrophenol in elevating the metabolic rate and in reducing excess fat in experimental animals and humans. Because of this specific biologic action it has been recommended for effecting a reduction in weight in obesity. The American Medical Association has sounded a warning, as it always does with new drugs, that the reports be taken with great circumspection and that enthusiasm be curtailed until further experimental and clinical material is obtained. Up to date a few casualties have appeared. The morbidities, on the other hand, would naturally escape detection and are as yet insufficiently reported.

It is generally believed that the action of the drug is upon the cell itself—direct cell stimulation. It is believed that this stimulation is in the nature of increased oxidation. The pharmacologic action of drugs on healthy animals is a distinctive physiologic process, not necessarily applicable to humans. The means of elaboration and excretion of the various metabolic products as innocuous compounds vary considerably with the species. Drugs act differently upon different species, so that the application of cause and effect cannot be safely predicated and applied to humans. In the application of drugs to the human species, the element of status quo must be taken into consideration. The ever-present carnal variability, susceptibility, and excretion rate of the body must also be considered.

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Obesity is a complex problem. Its phases are polyclinic and its effects manifold. Its etiology is not as yet fully understood. A profound knowledge of its etiological and causal relationships should be obtained before a hit-and-miss active tissue excitant is used or introduced. For each degree rise in temperature rate there is, roughly, a ten per cent rise, more or less, in metabolic rate. This does not necessarily mean, however, that there is an inherent capacity for a ten per cent increase in excretion rate or that there is an actual ten per cent increase in excretion rate from the kidneys, lungs, skin and intestines. Any of these organs may be damaged. It might ensue that an increase in metabolic rate might be followed by such suppression of excretion that the relationship might reach an alarming proportion, that is, the greater the metabolic rate, the less the excretion rate. Metabolic overloading can so overwhelm the body by its own overproduction that by simple biologic exhaustion we get distinct cellular degeneration, manifested by changes in the cell, osmotic block, fatty degenerations, cloudy swellings, hydration, disintegration by plasmolysis or dehydration with coagulation. An individual of five hundred pounds is burdened enough without introducing an increased metabolic load. A dose which is predicated for an individual of one hundred and fifty pounds cannot possibly apply to others by direct proportion of two hundred and fifty, three hundred or five hundred pounds.

Those changes in the pituitary gland which have been described by Cushing—the basophilic adenomata of the anterior portion—must be taken into consideration. We must consider the age of the patient, feeding habits, environmental maladjustments and actual inherited characteristics, such as endocrine imbalance or dysfunction. The thyroid begins to decline at about thirty years of age. The metabolic rate slows down, as does the eliminative rate.

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Dinitrophenol is a dangerous drug to foist on the medical profession and the public without every physiologic and pathologic fact weighed and considered. The author has seen a near calamity in a woman of four hundred and fifty pounds. There was a hyperpyrexia of one hundred and six degrees, extreme sweating, violent abdominal pains, hematemesis and exhaustion. This all occurred after the administration of five mg. per kilo in two divided doses.

The obese individual above all things is a problem distinct and unique. Of prime importance is dietary bookkeeping and a thorough study of the metabolic state. It is dangerous to tax the liver function. We have very poor means of establishing the actual liver function because it is extremely complex, certainly much more so than originally thought. The obese individual, in general, has a poorly cooperative endocrine system and, as a rule, a damaged, poorly functioning liver, more or less atherosclerosis and more or less nephrosclerosis. The excretion rate decreases as the metabolic rate increases. If the metabolism is persistently forced, early tissue exhaustion is encouraged, with local or generalized dissolution. Sugar consumption in the obese is less efficient, as a rule, as the individual gains in weight and as he becomes older. Generally speaking, the

(Concluded on page 350)

Calcium In the Treatment of Acute Gonorrheal Adnexitis

• Francis W. Pizzi, M. D., Orange, N. J.

PALLIATIVE and symptomatic medical treatment of acute gonorrheal salpingitis has long been the most widely recognized therapy in this condition. Many remedies have been proposed, including diathermy, autogenous vaccines, intramuscular milk injections, and typhoid-paratyphoid vaccine given intravenously. All of these measures have their advantages in specific cases but have for the most part proved unsatisfactory in my hands.

The inadequacy of therapeutic measures heretofore employed in acute adnexitis is strikingly emphasized by Pelouze (1), who says, "Nowhere in the domain of medicine do there occur sadder pictures than those commonly resulting from gonococcal infection in the female. Occurring, as it so frequently does at almost the threshold of womanhood, its psychological desolation often is almost as pitiful as is its physical wreckage."

In the constant search for improved methods of treating the complications of gonorrhea, attention has been directed to the use of calcium during the past few years through the publication of favorable results by such investigators as: Vonkennel (2), Herrold (3), Rupel (4), Diasio (5), Cartia (6), Zalewski (7), and others.

While it is well known that calcium is a normal constituent of the body and essential for the normal functional activity of nerve and muscle cells, Cantarow (8) states that this has resulted in a tendency to overlook the fact that calcium possesses certain specific pharmacologic properties, in conditions not associated with calcium disturbances, that make it of distinct value, for instance, in the treatment of acute inflammatory conditions.

In considering the advantages of calcium in acute adnexitis it must be kept in mind that in this condition, while it is essential to relieve the symptoms and make the patient comfortable, a satisfactory therapeutic agent must prevent further extension of the inflammatory process and hasten resolution of the exudation that has occurred as well.

Bayliss (9) has shown that calcium decreases cell permeability and thus limits exudation and transudation. Tunnicliff (10) Hamburger and Hekema (11) demonstrated that calcium increased phagocytosis by the leucocytes of the blood in experimental work on both man and animals. Clinically, Behan (12) found the pain of cancer was either entirely controlled or greatly modified by calcium injections and Bauer, Salter and Aub (13) secured dramatic relief from the abdominal distress of gallstone, renal, lead and intestinal colic by the same treatment. Herrold (3), Rupel (4), and Diasio (5) reported that pain in gonorrheal complications disappears rapidly following intravenous infusions of calcium. Pisani & Smejkal (14) concluded from their studies of pleural effusion that calcium both limits exudate formation and hastens the absorption of any exudate already present. All of these properties of calcium may logically be applied in the treatment of acute gonorrheal adnexitis.

Vonkennel (2) states that calcium therapy is indicated in acute exudative conditions of the mucous membranes, as in acute adnexitis, and he employed calcium chloride with success. The chloride of calcium, however, proved objectionable because it was so irritating that it could not be injected intramuscularly and in giving it intravenously any perivascular leakage proved painful and carried the risk of localized gangrene. Further, considerable care was necessary in its administration to prevent nausea, vomiting, disturbances of the circulation and other symptoms of shock.

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The introduction of calcium gluconate-Sandoz overcame the objections to the chloride and greatly improved the opportunity for calcium therapy, since this new salt was non-irritating and could be given intramuscularly, intravenously and orally.

Zalewski (7) obtained good results in the treatment of gonococcal adnexitis and in other gynecologic conditions with calcium gluconate. His method of administration consisted of drawing 10 cc. of the 10% solution into a 20 cc. syringe and then withdrawing 10 cc. of blood from the vein, permitting it to mix with the calcium solution. One-half of this mixture was then injected into the vein and the other half, after withdrawal of the needle, he injected immediately into the deep gluteal muscles. In this way he obtained the rapid and intense effects of intravenous medication combined with the slower intramuscular absorption and the protein effect of the blood.

Herrold (3), who employed this method combined with oral administration, says that calcium gluconate should be used routinely in all cases of acute gonococcal salpingitis and that he believes as a result fewer cases would require operation. He particularly recommends intensive calcium medication whenever there are prodromal symptoms of adnexitis. In four patients whom he treated during the early period, the condition did not progress beyond the initial stage.

Diasio (5), in a series of 50 patients treated in a similar manner, found that following the first calcium injections there was a fall in temperature and a coincident and gratifying relief from pain. After several injections there was a rapid decrease in the size of the palpable adnexal masses and the tenderness in the adnexal region disappeared. Re-

sponse to calcium therapy was best in the prodromal and acute stages of the infection.

Results similar to those of Herrold and Diasio are reported by Cartia (6), Boesken (15), Zalewski (7) and Karrenberg (16).

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Since October, 1931, in addition to the well recognized routine care, I have used calcium gluconate-Sandoz in acute adnexitis in the treatment of 23 patients. The age incidence ranged from 15 to 37 years, thirteen were married, eight were single and two were widows. Although 23 cases represent a small series, yet each one was a frank case of acute salpingitis with the classical clinical picture of this condition, and even though this limited number of cases may be inconclusive, the results obtained were uniformly satisfactory and possess some significance.

The chief complaint in all of the cases was acute abdominal pain located in the lower portion of the abdomen. The pain was bilateral in 20 cases and unilateral in three. In only four cases was there vomiting. Other complaints were frequency and urgency of urination and a vaginal discharge, yellow and profuse in 18 cases, grayish or white in five.

Pelvic examination in all cases revealed the usual discharge issuing from the cervical canal; bimanually there was found marked tenderness on attempted palpation of the adnexa in both fornices in 20 patients and in only one fornix in three patients (2 right, 1 left). Definitely thickened tubes and ovaries which had dropped back toward the cul-de-sac were found in 14 cases, while in 9 there was no demonstrable thickening or enlargement of the tubes.

Microscopic examination of the discharge from both the cervix and urethra was positive for gonococci in 10 cases and negative in 13.

The treatment employed in this series of 23 cases was:

1. Rest in bed.
2. Ice-bag to lower portion of abdomen.
3. Fluids in quantity.
4. Liquid diet.
5. Milk of magnesia in half ounce doses when necessary.
6. No sedatives, douches or cathartics permitted.
7. Calcium gluconate, 1 ampule of 10 cc. of the 10% solution, was injected intragluteally each day.
8. Calcium gluconate granules. 1 heaping teaspoonful three times daily before meals, in warm milk.

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The intramuscular injection of the calcium salt was preferred to the intravenous because of better cooperation on the part of the patient and because of the longer drawn out effect. It was felt that the supplemental oral administration would intensify and prolong the rapid and intense effects initiated by the ampule solution. In the majority of cases, the injections were not required in any case beyond six days, but the oral dosage was continued even after discharge from the hospital. This was considered advisable to prevent any acute exacerbation of the infectious process.

There was no pain at the site of the injection but there was a generalized sense of warmth that lasted about 3 hours. The calcium given by mouth acted as a mild laxative in most cases so that it was not necessary, as a rule, to give milk of magnesia.

As a result of this treatment the average period of hospitalization was 11.4 days and varied from a minimum of 5 days to a maximum of 22 days as compared with an average of 21 days for a previously observed similar group receiving the same treatment but with the calcium therapy omitted.

The most striking difference in those cases treated with calcium was the rapid alleviation of the pain, within a short time after calcium therapy was begun, so that the patients were able to rest comfortably. In 19 cases the pain was relieved within 24 hours; in three cases in 48 hours and in 1 case within 72 hours. Rigidity was gone in 48 hours and tenderness on pressure disappeared within 5 days. The temperature curve dropped to normal on the average within six days.

The relief from pain following calcium therapy was so dramatic and so uniformly satisfactory that if for no other reason than this calcium should be used routinely in the treatment of acute gonorrheal adnexitis.

At the time of dismissal all patients were given a pelvic examination and referred to the gynecological clinic for treatment of the urethra and cervix. The adnexal masses were reduced in size and were freely movable in all cases, but calcium was continued orally three times daily to prevent any possible recurrence.

Conclusion

A series of 23 cases of acute gonorrheal salpingitis was observed. In this series calcium gluconate-Sandoz given intramuscularly and by mouth was added to the well established routine treatment of this condition and as a result:

1. The average period of hospitalization was 11.4 days as compared to 21 days for a comparable group observed previously in which no calcium was given.
2. Relief from pain was dramatic and occurred in most patients within 24 hours after beginning treatment. The patients became comfortable and were able to rest.
3. Rigidity of the lower abdominal and pelvic tissues disappeared in 48 hours.
4. Tenderness on pressure over the lower abdomen was gone in from 4 to 6 days and the temperature dropped to normal.
5. Adnexal masses and pelvic exudate had undergone resolution by the end of the hospital period as determined by bimanual pelvic examination.
6. Calcium therapy is so uniformly satisfactory

that it should be employed in the treatment of all cases of acute gonorrheal adnexitis.

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Dinitrophenol—A Warning

(Concluded from page 347)

obese individual in youth had a high sugar tolerance and a high metabolism which, by the simple process of exhaustion and presenility, become a low sugar tolerance and a low metabolism. The B.M.R. determinations are scarcely competent guides to the reserve metabolism and eliminative capacity of the individual. A person can have a plus metabolic rate and still have a low metabolic and eliminative reserve rate. Man should keep the oxidation rate just below his excretion rate if he would prevent early tissue exhaustion and dissolution. Dinitrophenol should be used with the greatest caution and consideration. At the present time the drug is dangerous and should be withheld from merely well-meaning practitioners and the gullible, experimentally-minded public.

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Dinitrophenol is a drug which can increase the metabolic rate alarmingly and sometimes uncontrollably. It is not known if it has a cumulative effect. The drug should be used only by physicians who care to understand the obesity problem. It cannot be used as a fad, with a rigid dosage applicable to all ages and all weights. There must be a clinical flexibility and a high limit of dosage. It should not be used where the elimination is taxed, in the constitutional states, or where the endocrine system is sorely encumbered. It should be used with care in obesity even where the organism seems otherwise healthy. It should not be used in the thyroid states, in quiescent tuberculosis, in quiescent polyarthritis, in hypertension with low sugar tolerance, in arteriosclerosis, diabetes and nephritis. It should not be used in the edemas, subcutaneous or otherwise. The lymphatic and purpuric states are also contraindications. The nephroses and myxedemas might do better with thyroid carefully administered. One must remember that to increase oxidation in quiescent states indiscriminately is to open the box of Pandora.

1407 East 2nd Street.

ASSOCIATED PHYSICIANS OF LONG ISLAND

109th Regular Meeting

Golf Outing and Dinner

The autumn outing of the Associated Physicians of Long Island was held at the Wheatley Hills Golf Club in East Williston, Long Island, on Tuesday, October 23, 1934. The program began when the members assembled at 1:30 P.M., although many had taken the day off from the office to play golf on the beautiful rolling course and had eaten lunch at the club. The usual half hour around the punch bowl was enjoyed and it was a pleasure to greet members who had been absent from many meetings and to hear their regrets at having missed the fun.

The scientific session at 2:30 P.M. was arranged by Dr. Charles E. Scofield, chairman of the scientific committee, with valuable assistance from Mr. J. Louis Neff. The general topic for the afternoon's symposium was cancer. Dr. Arthur C. Martin of Hempstead impressed upon his audience the responsibility of the physician in the prevention of cancer through early and correct diagnosis and adequate treatment. Dr. Martin is chairman of the Nassau County Committee of the American Society for the Control of Cancer. Mr. J. Louis Neff, who is Executive Director of the Nassau County Tumor Clinic and Executive Secretary to the Nassau County Medical Society, described the unique plan which is in operation in Nassau County. Many members expressed their opinion that it is a good solution of the local cancer problem and one which other counties would do well to study. Dr. Norman Treves of Hempstead and New York City demonstrated some patients from the clinic who had been remarkably benefited by treatment and he impressed the members with the practical results from a tumor clinic. Dr. Treves is consultant to the Nassau County Tumor Clinic. Lively discussions by Dr. George Austin Wyeth of Manhattan and Dr. John E. Jennings completed a scientific session of very high caliber, and one which held the members' interests without flagging.

The business meeting at 5 P.M. was called to order by the president, Dr. Thomas B. Wood, who announced with regret the death of Dr. Irving Barnes of Oyster Bay, a member whose attendance record ranked high and whose genial face was keenly missed at this meeting. Dr. Harold E. Rhame of Brooklyn was unanimously elected to membership and welcomed by the president.

The dinner was even better than the last one, which set a high standard in entertainment and was a tribute to the efforts of our hard working chairman of the entertainment committee, Dr. Charles A. Anderson of Brooklyn. The members thoroughly enjoyed the moving pictures and talk of Dr. Robert W. Shearman, a true globe-trotter and intensely interesting speaker. His "Physicians' Travelogue" was enthusiastically received.

President Thomas B. Wood announces that the next meeting will be held in January. This will be the annual meeting with election of new officers and the scientific session will be conducted by the staff of the Long Island College Hospital. The date for this meeting will be announced in the next issue of the "Times."

Menstrual Edema: Preliminary Report

J. Shirley Sweeney, Dallas Texas, (*Journal A. M. A.*, July 28, 1934), records the weight of forty-two normal healthy young women before, during, and after menstruation. Approximately 30 per cent of these women showed a gain of 3 or more pounds sometime during the menstrual cycle, usually just before the period was established. Other cases showed a true pitting edema. This phenomenon may be due to some endocrine disorder or disturbance of the sympathetic nervous system rather than to changes in the blood constituents or to renal insufficiency.

Prevent ear abscess and mastoiditis by not blowing the nose too hard.

An Inexpensive, Efficient Apparatus for Suprapubic Drainage

• Edward A. Mullen, M.D., Philadelphia, Pa.

THE suprapubic cup described in this article has been designed by Andrew Aird, R.N., and during the past three years has been found efficient in the Urological Clinic of the Graduate Hospital of the University of Pennsylvania.

The usual contrivances were objectionable because: (1) too expensive, (2) heavy and cumbersome, (3) difficult to regulate, requiring frequent adjustments to prevent leakage, (4) if the subject is slim usually no amount of adjustment will produce a water tight coaptation to the skin; consequently a new device was designed.

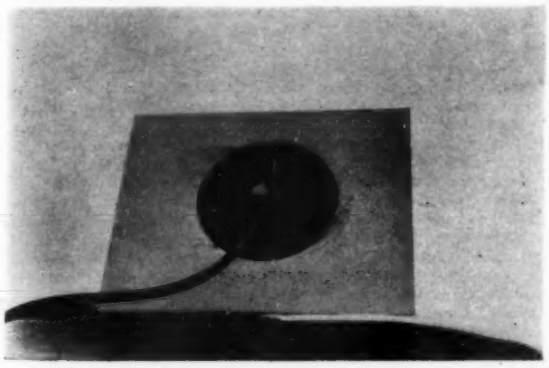

Fig. 1—Rubber Base with Circular Disc.

By this method the cup is fixed to the skin by one of the cements commonly used in patching rubber or with liquid adhesive.

The base of this cup is composed of a circular sheet of crêpe rubber 2 mm. in thickness. It has been found that crêpe is more flexible and forms a better union with the skin than other types of rubber. This disc is 12. cm. in diameter and has a circular opening 3.5 cm. in diameter which fits directly over the wound.

Attached immediately over the opening in the base is a rubber reservoir which is made in two styles, one for hospital use and the other for permanent wear. They are both cup-like in shape and are drained by a No. 28 F. rubber tube. The former has an opening through which the wound can be dressed and the healing process observed without removing the cup. The latter is completely closed so that there can be no overflow of urine in patients who are ambulatory. In either type the No. 28 F. tube can be extended into the bladder so as to prevent closure of the suprapubic opening, should permanent drainage be desired.

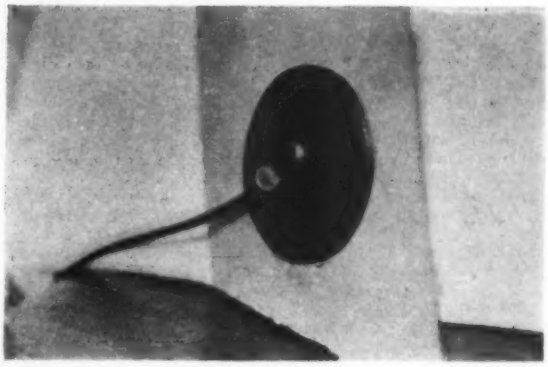

Fig. 2—Showing Orifice of Tube.

It has been found to function satisfactorily for periods of seven to ten days without changing. Removal of the cup is accomplished by dissolving the cement with a small amount of benzene.

The cup is (1) inexpensive, (2) of extremely light construction, weighing less than 40 grams, (3) easy to apply, and (4) causes no constriction within the area of its application, (5) it is as effective on a slim subject as on one who is obese, (6) the cup is comfortable to wear and movements of the patient do not loosen its fixation to the body.

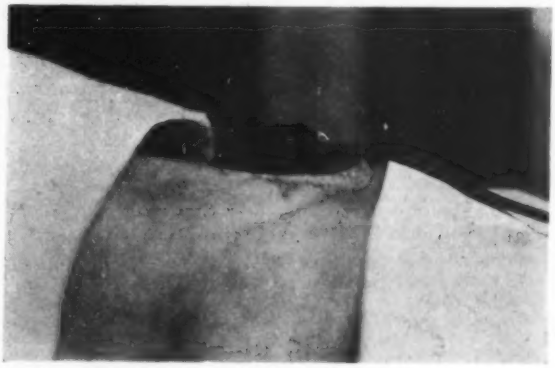

Fig. 3—Attached to Patient.

The most useful field of application, in the writer's experience, has been in the postoperative care of patients who have undergone a suprapubic prostatectomy. It is equally effective, however, following any type of suprapubic operation on the bladder, and also for draining ureterostomies and nephrostomies.

2615 W. Somerset Street.

Economics

Department Editor: THOMAS A. MCGOLDRICK, M.D.
CHAIRMAN COMMITTEE ON ECONOMICS OF THE MEDICAL SOCIETY OF THE COUNTY OF KINGS, BROOKLYN

The Laborer is Worthy of His Hire

THE physicians in the outpatient department of one of New York's Municipal Hospitals have recently petitioned the Commissioner of Hospitals for compensation for the service they render to the city's indigent sick. A similar petition by them presented six months ago received no attention. This petition, the Commissioner stated, will be forwarded to Mayor LaGuardia. There is no good reason why these physicians should not be paid. There is no good reason why the burden of the sick indigents at this hospital should be borne by its doctors nor why the medical care of the less favored people throughout the entire city should be borne by the medical profession. Food, clothing, light, heat, nursing, medicines, supervisors and administration are not given by nor sought from the purveyors of these necessities. Doctors, much as they would like, can no longer afford to give their services without compensation. They, too, must live. Great numbers of patients formerly attended by private physicians, and registered by the city as deserving and receiving help, attend these outpatient departments where treatment is given and no recompense made.

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Most of the counties of the State have made provision for the payment of physicians for service to their poor. The Federal Government, through different relief departments, pays something for these sick. New York City, however, pays nothing. In fact it has a law on its books expressly forbidding remuneration to any doctors on the staff of its municipal hospitals or dispensaries.

The reason given is that the city is too poor; it can not afford it. It has always been too poor, it seems, to pay the doctors of its hospitals. In the periods of greatest prosperity as well as in the days of depression the same excuse was given. When new subways and highways, tunnels and official skyscrapers, new roads, new streets, new water fronts and water supply, even new extravagant hospital buildings were needed, the necessary money was found. A few years past, the attention of the highest city authorities was drawn to the injustice they were perpetrating upon these hospital doctors by retaining the monies earned in the workmen's compensation cases. The Mayor replied that he recognized the injustice but that "he felt it would prove embarrassing for a public official to now take any action to refund."

The present administration has tried to remedy the Workmen's Compensation abuse by caring for these cases only during the emergency, but during that time the earned fees of the doctors are still taken by the City.

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Not only in the outpatient departments of Municipal hospitals but in all outpatient departments should the attending doctors be paid. These voluntary hospitals in New York City have collected from their indigent outpatients as much as $3,000,000 in a year. Their representatives in the Hospital Conference have within a year gone on record as favoring the payment of their dispensary physicians "as soon as funds can be found." The monies now collected at the dispensaries are deemed vital to the existence of the hospitals. When the insurance plans now under consideration are perfected, and the hospitals certain of payment for all their patients, it may be that the money will then "be found" for the dispensary staffs.

The incentives for the doctor to continue attendance at dispensaries are lessening. It is no longer necessary to work in the dispensary to secure permission to treat private patients in the hospital. There are now very many private hospitals where any doctor in good standing may treat his patients and have available every aid. Doctors graduating today, after the splendid college courses, supplemented by interneship in registered hospitals, are far better equipped than in years past. To acquire experience, familiarity with and dexterity in manual technique, and skill in the use of instruments of precision, a much shorter period is needed than was formerly thought necessary. Postgraduate courses and scientific journals supply a need. The association of medical society membership will supply some of the contacts once deemed obtainable at the dispensaries. There must be new reasons for a doctor to spend ten, twenty or even twenty-five years in one service of an outpatient department.

Prognosis in Arteriosclerotic Heart Disease

L. E. VIKO, Salt Lake City (*Journal A. M. A.*, Aug. 25, 1934), states that since prognosis is merely quantitative diagnosis, rational treatment depends on the ability to estimate the stage of cardiosclerotic process. Most reports considering the prognosis of a series of cases of angina pectoris include not only those in which this symptom is due to coronary arteriosclerosis but also those in which it is due to rheumatic aortic disease and syphilitic aortitis; likewise cases of coronary occlusion due to syphilis are grouped together with those due to coronary arteriosclerosis. Since it is reasonable to suppose that the etiologic factor might modify the prognosis, the author's study includes for discussion only those cases in which coronary arteriosclerosis was considered the cause of angina or coronary occlusion. The attempt is made to present the prognosis of cases corresponding to the pathologic sequence of coronary sclerosis (with or without occlusion) and myrocardial fibrosis. Of the 153 patients, seventy-six are dead and seventy-seven are living, permitting comparison and reexamination of the living patients to help clear up questionable points. A study of the symptomatology of those patients who had died of heart disease showed that there had been a surprising tendency for the clinical picture to follow either the anginal syndrome or the syndrome of congestive failure. Though a few cases beginning with angina pectoris changed to the picture of chronic congestive failure and cessation of angina, usually congestive failure was a terminal event. Likewise a high percentage of those cases beginning with congestive failure presented this syndrome to death without apparent angina or coronary occlusion. In a high percentage of cases the first symptom pointed to the type of death. One half of the patients in whom dizziness, syncope or numbness of the extremities was the first symptom died not of heart disease but of cerebral hemorrhage. Hence it seemed to be advantageous to study the cases in separate groups according to cause or type of death.

Cancer

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EXECUTIVE SECRETARY, NEW YORK STATE COMMITTEE OF THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER

Assisted by CHARLES WILLIAM HENNINGTON, B.S. (Rochester), M.D. (Hopkins), F.A.C.S., *German Literature Editor,* and UMBERT CIMILDORO, A.B. (Cornell), M.D. (Rome), *Italian Literature Editor.*

The Clinical Conference On Cancer

Held at the Strong Memorial Hospital, Rochester, N. Y., at the Ninth Annual Meeting of the New York State Committee of the American Society for the Control of Cancer, Inc.

The Present Status of the Cancer Problem As Observed in the Rochester Hospitals

6. CANCER OF THE BLADDER

BY ARTHUR H. PAINE, M.D.

GENITOURINARY SURGEON TO THE GENESEE HOSPITAL

FROM the accompanying tables the following deductions are made:

From table I is evident there is little change from 1928 to 1932 in the time elapsed between onset of symptoms and examination by a physician.

Table II indicates that more of the early and less malignant types of tumor were seen earlier in 1932 than in 1928.

Table III shows that while the cases seen in 1932 obviously have not had time for recurrence over a period of four years, nevertheless twelve are tumor free one year later, as against two tumor free in 1928, and the deaths under one year are twice as many in 1928 as in 1932, which would indicate that by seeing the early types of tumor before extension and further malignant degeneration and metastasis, and with improvement in technique of treatment, something has been accomplished.

TABLE I

Duration of Symptoms Prior to Urological Examination

	1928	*1932*
Under 1 Week	0	1
1-2 weeks	2	1
2-4 weeks	2	3
1-2 months	2	2
2-6 months	3	2
6 months-1 year	2	4
1-2 years	2	2
2-3 years	1	0
3-5 years	0	1
5-10 years	2	2
Over 10 years	1	0
Unknown	0	2

TABLE II

Classification of Bladder Tumors

	1928	*1932*
Simple papilloma	0	3
Malignant papilloma	1	7
Papillary carcinoma	7	6
Infiltrating carcinoma	9	4
	17	20

TABLE III

Results of Treatment of Bladder Tumors

Died	*Carcinoma*		*Other Causes*	
	1928	*1932*	*1928*	*1932*
Under 1 year	10	5	0	1
1-3 years	0	0	2	1
3-5 years	3	0	0	0
Unknown	2	2		
Tumor free	2	12		
Recurrence	3	0		

Clinical Circulatory Effects of Dinitrophenol

A. B. STOCKTON and W. C. CUTTING, San Francisco, (*Journal A. M. A.*, Sept. 22, 1934), investigated the effects of dinitrophenol on the circulation in thirteen patients with apparently normal cardiovascular systems. Six of the group were placed at bed rest in the hospital, and control observations of blood pressure, pulse rate, vital capacity and venous pressure were made regularly at 8 a. m., 2 p. m. and 7 p. m. The control period was continued until at least three consecutive results were in close agreement. A quantity of 300 mg. of sodium dinitrophenol was administered orally in three divided doses each day, and the circulation and vital capacity were observed for from four to twelve days. The ambulatory patients were treated in a similar manner, except that the same functions were observed once daily at 4 p. m. Before the observations were made, the patient was required to rest in a prone position without pillows for one hour. Vital capacity and systolic and diastolic blood pressure were not significantly affected by the sodium dinitrophenol. Definite increases in venous pressure and in pulse rate occurred in ten of the thirteen cases studied. These increases showed much fluctuation. The concurrent increases in pulse rate and venous pressure explained the maintenance of normal blood pressure in spite of the marked peripheral vasodilatation resulting from the dinitrophenol. Despite the variability in all observations, it was quite evident that, while no significant changes occurred in blood pressure and in vital capacity, there were definite increases in pulse rate and in venous pressure.

Chronic lead poisoning: always think of this in all obscure illnesses. Mild poisoning will cause a weary mind and body. Roengten ray may show lead line on long bones (increased density). Urine should be tested for lead. Blood to be tested for basophilic stippling. Latter may only be present during acute attacks.

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Rhinolaryngology

The Action of Cilia and the Effect of Drugs

V. E. Negus (*Journal of Laryngology and Otology*, 49:571-585, September, 1934) notes that the "main defence" of the nose and nasal sinuses, the trachea and bronchi is supplied by the cilia. The cilia are "remarkably persistent in action; they have a set purpose in life and they stick to it with great pertinacity." Certain drugs can, however, inhibit or paralyze their action. Acid solutions also paralyze their action. In experiments on rabbit ciliated epithelium placed in solutions of varying acidity, the author found that if the pH of the solution in which the cilia are bathed is lowered to 6.4 or less, their action cannot continue. The action of the cilia of the upper respiratory tract must, however, be continuous in order to protect the cavities they line against infection; if the cilia stop, even after several hours, as in some suppurative processes, the result to the patient may be "disastrous." Observations reported by other investigators and the author's own findings indicate that in inflammatory conditions in the nose and sinuses, the reaction of the secretions, and probably, also of the tissue fluids in the area involved tend to become acid. This acidity has an unfavorable effect on ciliary action, and thus favors the spread of the infection. In correcting this acidity, removal of the bacteria, the use of alkalis for irrigation, and the administration of alkalis by mouth are indicated. The author has found the latter of definite value in some resistant cases of sinusitis. Physical conditions of moisture or dryness, and viscosity are also of importance for ciliary action; all these factors must be considered if "useful conclusions are to be obtained."

COMMENT

A great many papers have been written about the ciliated epithelium of the nose within the past few years. There is no doubt of the value of this ciliated epithelium. Moving pictures demonstrating the action of the cilia are very instructive. The to and fro movement is quite remarkable and probably has a great deal to do with the elimination of waste products and bacteria from the nose. It is instructive to note in this article that acid solutions retard the activity of the cilia while, on the contrary, alkaline solutions do the opposite. This is an added reason for washing the nose out thoroughly with alkaline solutions whenever there is evidence of infections, but one must be careful not to leave the mucosa too raw after such washing and should instruct the patient to follow the washing by spraying the nose with some bland oil.

H. H.

The Lysozyme Content of the Nasal Mucus During Colds

A. Hitling (*Archives of Otolaryngology*, 20:38-46, July, 1934) states that the nasal mucus normally contains an enzyme known as lysozyme, which is a powerful antiseptic. This enzyme was first described by Fleming in 1922, and has since been studied by several workers. The author reports a special study of the lysozyme of the nasal mucus in 7 cases of cold in the head. Two strains of bacteria were used for testing the lytic power of the mucus. In 3 of the 7 cases, there was a marked decrease in the lytic power during the invasive stage of the cold, and in one of these cases six hours before any symptoms developed; in these 3 cases there was a definite increase in the lytic power preceding a definite improvement in symptoms. In 2 cases, the decrease in lytic power in the early stage, and increase before improvement was demonstrable but less marked; in 2 cases there was little variation in the lytic power of the mucus. In these last 4 cases there was continued sore throat, and in one case aphonia; but none showed tonsillitis, only pharyngitis or laryngitis. The change in lysozyme content was not a dilution phenomenon, as it may be low in scanty secretion and was often high in profuse secretion on or preceding improvement in symptoms. The cases studied are too few to permit definite conclusions to be drawn, but if further study proves a diminution of the antiseptic properties of the nasal mucus before or during the invasive stage to be characteristic of a large percentage of head colds, "it will be a very suggestive piece of information about this common ailment."

COMMENT

That the mucus secretion of the nose contains some type of enzyme has apparently been proved during the past few years. We are glad to hear that an enzyme called lysozyme has definitely been isolated and is a factor worthy of consideration. It should not be surprising that any type of mucus contains an enzyme when we realize that enzymes are present in mucous secretions of the stomach and intestines.

H. H.

Suprarenal Cortex Extract in Pyogenic Infection

W. F. Wenner and A. J. Cone (*Archives of Otolaryngology*, 20:178-187, August, 1934) report the use of suprarenal cortex extract in 28 cases of pyogenic infections of the upper respiratory tract and ear, chiefly acute sinusitis. The extract was prepared from whole beef suprarenal glands by the method described by Zwemer and his associates; the dosage varied from 2 to 7 c.c. given at intervals of two or more days. The extract was found to be effective in infections limited to the mucous membrane of the nose, sinuses, larynx and nasopharynx and in cases of cellulitis. In patients with well developed inflammatory reaction in the mucous membranes and with poor resistance to infection it was necessary to give the injections at intervals of not more than forty-eight hours to obtain good results. In cases with mastoiditis the use of the cortical extract did not alter the necessity for operation, but improved the post-operative course. The extract tended to reduce the temperature when there was fever; and improved the general condition of the patient; no direct effect on the total leucocyte or the Schilling differential count was observed. Animal experiments have shown that the intramuscular injection of suprarenal cortex extract increases the phagocytic activity of the leucocytes, although the extract has no effect on suspensions of these cells. The therapeutic effect of cortical extract in infections, the authors believe, is due in part to an increased activity of the leucocytes.

COMMENT

The authors claim that the intramuscular injection of suprarenal cortex increases the phagocytic activity of the leukocytes. If this is so, such injections ought to be of value in all types of infection. We consider the internal secretions of great value in the stability of the body mechanism, but more positive evidence will be necessary before we consider them of therapeutic value except as adjuvants to treatment. We suggest that the same results may be obtained by the injection of nonspecific proteins.

H. H.

Curability of Hay Fever by Preseasonal Treatment

I. C. Walker (*Archives of Internal Medicine*, 54:289-307, August, 1934) in a follow-up of 90 patients treated preseasonally for hay fever, found that 55 of these patients were entirely free from symptoms for three years or more after completion of treatment; 2 of these patients were treated for two seasons only; the others for three to six seasons; but 36 were cured by treatment for four seasons or less. Of this group 21 were treated with timothy grass pollen extract and 34 with rag-weed pollen extract. There were 35 patients much improved but not entirely relieved from symptoms; the duration of treatment was shorter than in the former group; and many of these patients were sensitive to proteins other than the pollens with which they were treated. In a review of 734 cases of hay fever given preseason treatment in 1919 to 1930, Walker finds that of those treated for only one season, 15 per cent. have been free from hay fever; and of those treated for two seasons, 11 per cent. have been permanently free from symptoms; in patients treated for three seasons, 47 per cent. have been free from symptoms; of the entire series of 734 patients treated preseasonally, 190, or 26 per cent., remain free from hay fever; and if 68 other cases still "on trial," who are expected to be relieved of symptoms, are added, this percentage will be raised to 35 per cent. The majority of cures result from treatment for three or more seasons. Privately made individual pollen extracts were used in these cases in a locality where the pollen flora is not very diversified; this undoubtedly was a factor in the results obtained.

COMMENT

Anything that comes from the pen of Dr. Walker on the subject of hay fever must be read with seriousness. However, our own findings are not in accord with his. The injection method has been used for a great many years. It is a nuisance, takes up a great deal of time and the results are often questionable.

During the past season we have been getting very gratifying results by treating hay fever and allergic cases according to the method of Warwick. This consists in treating the nose by ionization of certain metals, particularly zinc. The advantage is that one treatment only is necessary and results of other observers have shown that many patients have been cured for a period of more than seven years. We feel that this method of treatment will probably prove of extreme value in the future.

H. H.

Bismuth in the Treatment of Non-Syphilitic Sore Throat

A. Monteiro (*Annales d'oto-laryngologie*, No. 6:557-566, June, 1934) reports that he has found that injection of a bismuth salt is very effective in the treatment of sore throat, not of syphilitic origin. Many different bismuth salts have been employed, both soluble and insoluble; those having the highest concentration of bismuth are most effective. With a bismuth salt containing 0.05 gm. of bismuth per ampoule, two injections have been found sufficient to effect a cure in all cases; and in many cases a single injection is effective. The symptom first relieved is pain on swallowing, which ceases completely within a few hours after the first injection. The inflammation, the fever and malaise subside rapidly.

COMMENT

We are glad to hear of some type of treatment which proves of immediate value in cases of severe throat inflammation. We have found that certain cases can be treated very nicely along the following lines. The throat should be irrigated every three hours with a mild solution of permanganate of potash. Three times a day, drops of 2% mercurochrome should be applied to the nasopharynx through the nose, for it is our feeling that a greater part of the infection is in the nasopharynx. An ice bag should be applied to the throat and the patient should be given cracked ice to suck. Analgesics such as codein are essential. It is imperative that the bowels be kept wide open.

H. H.

Treatment of Cancer of the Larynx

M. Equen (*Southern Medical Journal*, 27:776-780, September, 1934) notes that cancer of the larynx if it involves the vocal cord or its immediate neighborhood gives evidence of its presence earlier than cancer in any other part of the body except the skin. If every case of persistent hoarseness was carefully investigated and a biopsy made of any suspicious lesion found more cancers of the larynx would be diagnosed in the early stage when comparatively slight operations can effect a cure. Early carcinomas of the vocal cord can be removed through the laryngoscope even though of a high grade of malignancy, as this leaves the cartilaginous wall intact; if the growth is not entirely removed by this procedure, laryngectomy can be done subsequently. Laryngofissure is a "slightly more formidable" operation, but is indicated in carcinoma of low grade malignancy involving the middle or anterior third of either cord, but not affecting its movement. Extrinsic carcinomas of the larynx, those of grade 3 or 4 malignancy, and those causing fixation of either cord, require laryngectomy. This operation is absolutely contra-indicated only if distant metastases are present. It is best, the author believes, to follow this operation by radiation.

COMMENT

This excellent article needs no comment. The sooner the general practitioner realizes that any hoarseness in a patient of middle age or over necessitates a thorough examination of the larynx, the sooner extensive operations for malignant growths will be a thing of the past. Simple malignancies can often be attended to intra-orally.

H. H.

Otology

Corrective Measures for Preventive Deafness

G. Berry (*Canadian Medical Association Journal*, 31:-284-289, September, 1934) notes that in the treatment of progressive deafness, it is important to treat any condition in the nose and throat that may be causing recurrent colds or congestion of the Eustachian tubes; and also to build up the general health by suitable diet and regimen. In patients with constantly increasing deafness that none of these measures relieves, there are three important aids to be considered: lip reading, mechanical hearing aids, and "psychological rehabilitation." Training in lip reading is important in patients in whom deafness begins in youth; the young person learns more rapidly than the old. There are many types of hearing aids, but in each case the aid should be adjusted to the individual. With a hearing aid, the deaf person cannot hear as well as a normal person without one, but he can hear something and this induces him to try to hear more. In the psychological rehabilitation of the deaf person, membership and activity in a League for the Hard of Hearing is of great value.

COMMENT

There is no one who is better acquainted with the problems of the hard of hearing than Dr. Gordon Berry. Much as we agree that lip reading, mechanical hearing aids and psychological rehabilitation are necessary, we feel that it is unfortunate that Dr. Berry does not outline some method of medical treatment which can be used successfully in patients who are in the preventive stage. We do not hesitate to say that we have been quite successful when proper treatment has been instituted. Considering that patients will insist upon some type of medical treatment,

it is up to the otologist to outline a program which will meet with success.

H. H.

The Treatment of Deafness

D. F. Fraser-Harris (*Lancet*, 1:481-483, Sept. 1, 1934) notes that there is no body of persons qualified to interpret an aurist's prescription and provide an appropriate hearing aid for a deaf person in the same way that opticians follow an oculist's prescription and prepare suitable spectacles. This is because the science of optics has been developing for two hundred and fifty years, but the great advances in electrical instruments for testing hearing and making it possible to prescribe a definite type of hearing aid for a deaf person have been made only since the Great War. With the modern audiometers, hearing curves can be charted indicating what sound intensities are heard by the deaf person, and what sounds are not heard. In this way the sounds that should be amplified by the hearing aid suitable for that person are indicated. The author suggests that a concerted effort should be made to train and organize a body of technicians who could follow such prescriptions in the preparation of hearing aids, and thus put the use of such aids on a strictly scientific basis.

COMMENT

We are happy that the author has brought out the necessity for making proper audiometric tests with the audiometer. They are of extreme importance. But this is far from showing us how to treat deafened patients. Every hard of hearing person is a definite entity and his problem is an individual problem. Again we say that improvement can be shown in many of these patients if one will give as much attention to them as one would to a patient with an acute mastoid condition.

H. H.

Ménière's Disease

W. E. Dandy (*Archives of Otolaryngology*, 20:1-30, July, 1934) reports 42 cases of Ménière's disease; 26, or 62 per cent. of the patients were males; and 16, or 38 per cent. females. Only one patient was less than thirty years of age, and in two-thirds of the cases the onset was in the fifth and sixth decade. The characteristic symptoms of Ménière's disease were present in all these cases —attacks of dizziness with nausea and vomiting and deafness and tinnitus in one ear. In 70 per cent. of the patients in this series, the left ear was affected. The three characteristic symptoms occurred at onset in about equal percentages; in 4 cases all three symptoms occurred synchronously at onset; in 12 cases two of the symptoms occurred together at onset. The deafness was usually gradually progressive; the tinnitus was of various types and usually confined to the deaf ear, but occassionally appeared to be bilateral. At first the attacks occurred at infrequent intervals in most cases, increasing in frequency and severity, so that when the patients came under observation attacks occurred as often as once or twice a month, and in several cases more frequently. In 3 of these cases partial section of the auditory nerve, *i.e.*, total division of the vestibular branch, was done on the affected side; in the other 39 cases total section of the auditory nerve was done. In none of these cases have the attacks of dizziness recurred; in the cases of total section of the auditory nerve, hearing is, of course, lost on the operated side; tinnitus entirely disappeared in 20 of these cases, and was diminished in 2 cases. In cases of partial section of the auditory nerve hearing has been preserved. It is hoped that this operation in the earlier stages of Ménière's disease may make it possible to prevent the progressive loss of hearing and relieve the other symptoms.

COMMENT

There is no more difficult disease to diagnose than this. In spite of the fact that there are certain cardinal symptoms, such symptoms can be simulated by other things than an affection of the internal ear. We have seen symptoms of Ménière's disease associated with a gastro-intestinal intoxication and all symptoms have disappeared when the intestines have been properly taken care of. The most severe case in our experience, with symptoms lasting over two years, was due entirely to a stenosis of the left Eustachian tube. When this was opened up the symptoms disappeared.

H. H.

Labyrinthitis Secondary to Middle Ear Otitis

L. W. Dean and D. Wolff (*Annals of Otology, Rhinology and Laryngology*, 43:702-717, September, 1934) report a microscopic study of 68 ears from 46 cases of otitis media complicated by labyrinthitis. In the cases in which both ears were studied, evidence of otitis was found in each ear, although often more fulminating on one side or the other. This study showed that infection may pass from the middle ear to the labyrinth by both direct and indirect extension. The routes of direct extension were found to be: Fistula through the round window; fistula through the oval window; fistula through the bony capsule resulting either from necrosis of the bone or mechanical trauma. There was pus in the niche of the round window in 64 of the 68 ears examined; infiltration of the mucosal layer of the membrane in 43 ears; and infiltration of the fibrous layer in 25 ears; complete breaking down of the round window was observed in only 4 ears, each in a different case. Pus was found in the niche of the oval window in 51 ears; the oval window region is better drained by paracentesis than that of the round window. Fistulae of the bony capsule of the labyrinth due to necrosis were found most frequently in the horizontal canal and in the promontory. Extension of infection from the middle ear to the labyrinth may also be by the blood vascular route, through the vessels of the temporal bone. In 14 ears in 11 cases, suppurative labyrinthitis was found. From their study of the pathological findings in these cases, the authors conclude that the best treatment of labyrinthitis is its prevention by means of "adequate drainage at the proper time" of the infected middle ear and marrow spaces adjacent to the endosteum of the labyrinth. Operation to establish drainage in acute cases should be done only when the clinical picture indicates that "Nature has built a barrier to the infection." In a progressive virulent otitis media with labyrinthitis and meningitis, the process cannot be limited by the defensive powers of the body and operation only hastens the spread of infection. A chronic necrosing mastoiditis or chronic mastoiditis with cholesteatoma may also cause labyrinthitis by a slowly progressive process; such cases can be operated at any time with safety.

COMMENT

It is worthy of note that Dean and Wolff have found that a definite infection of the labyrinth can take place from a middle ear condition, either by direct or indirect extension. The authors report an examination of forty-six cases of otitis media complicated by labyrinthitis. Most often the extension is through some fistulous avenue in the bony capsule. The authors conclude that the best treatment is prevention by adequate drainage of the middle ear at the proper time. Unfortunately no one can tell when is the proper time.

H. H.

Conservative Treatment of Petrositis

S. D. Greenfield (*Archives of Otolaryngology*, 20:172-177, August, 1934) notes that one of the cardinal symptoms of petrositis, *i.e.*, suppuration of the petrous pyramid, is a profuse discharge from the ear. This discharge does not originate in the tympanum in such cases, but comes through it from the petrous pyramid. The author is of the opinion that this "preformed channel" through the tympanum may in some cases give sufficient drainage to effect a cure without operation. He reports 2 cases of petrositis in children, complicating otitis media and mastoiditis, in which pain in the affected ear and in the head and eye on the same side developed after the mastoid operation, when the mastoid wound was healing satisfactorily. This was accompanied by profuse discharge from the ear. Because of this profuse discharge, no operation was attempted, and recovery was finally complete. This leads the author to conclude that some cases of petrositis may be cured without operation; as long as the ear discharge continues to be profuse. This does not apply to

cases where the discharge is scanty or the process in the middle ear has resolved.

COMMENT

This is a condition of suppuration of the petrous pyramid, with associated infection of the middle ear and often of the mastoid. The author states that many of these cases clear up without operative intervention. It has been our experience that an infection of the petrous bone is merely accidental and may occur even when the most complete mastoid operation has been performed. In some cases, it is necessary to reoperate and go more thoroughly into the petrous portion of the temporal bone. We know of very few instances in which there has not been complete recovery and those were cases in which the infection extended backwards into the cerebellum.

H. H.

Pneumococcus Mucosus in Otology

F. Lemaitre (*Bulletin de l'Academie de médicine*, 111:782-786, June 5, 1934) calls attention to the importance of *Pneumococcus mucosus* infections in otology. The great danger of middle ear infection with this organism is that the clinical symptoms are so slight, while the mastoid and especially its deeper structure are invaded, and meningitis and other intracranial complications are frequent. The chief clinical symptom of *Pneumococcus mucosus* infection is the ear discharge. Pain is absent or slight, and there is no fever or other general symptom suggesting a severe infection; even when the mastoid is invaded, there are no severe symptoms calling attention to this involvement. Diagnosis can be made only by bacteriological examination of the discharge, and radiological examination of the mastoid region, to determine whether or not the latter is involved. If mastoid involvement is found, prompt operation is indicated; the middle ear should also be carefully treated and disinfected, until the organism entirely disappears, as the infection tends to persist for months or even years.

COMMENT

It is important to have this matter brought to our attention. The author claims that the discharge from the ear is often slight, and there is no fever or other general symptoms suggesting a severe infection. Diagnosis can only be made from bacterial examination. If the mastoid is involved, prompt operation is indicated. It is in such cases that x-ray pictures of the mastoid bones are of great value.

H. H.

Gynecology

Menstrual Disturbances of Endocrine Origin

C. A. Elden (*American Journal of Obstetrics and Gynecology*, 28:179-186, August, 1934) reports a study of 60 patients with menstrual disturbances in whom pathological conditions in the pelvis and systemic disease were carefully ruled out. In order to determine the endocrine gland primarily involved a special study of each patient was made; the history was carefully studied for evidence of endocrine dysfunction; and the patient further examined for related stigmata. A basal metabolism test was made; blood sugar was determined and a galactose tolerance test made; and the non-protein nitrogen, urea, uric acid and creatinine of the blood were determined. In addition the estrin level of the urine was determined. If the findings indicated pituitary gland disease, visual field and blind spot measurements were made; and stereoroentgenograms of the skull. The complete study of each patient took from ten days to two weeks. In this study it was found that there was no relation between the type of menstrual disturbance and the endocrine gland primarily involved. To establish the diagnosis the clinical, physical and laboratory data must all be considered. It was found that menstrual disturbances may be due to hypofunction or hyperfunction of the thyroid or pituitary as well as to ovarian dysfunction; there are types of intermenstrual bleeding at the time when ovulation is supposed to occur considered to be due to failure of the anterior pituitary hormone to cause the rupture of the follicle with subsequent lutein tissue formation. The best results in treatment were obtained in cases of amenorrhea due to hypothyroidism and in this midinterval type of metrorrhagic, certain other types of hypopituitarism responded well to treatment and others were refractory. Enteric coated capsules of anterior pituitary gland in massive doses were used in the hypopituitary cases. The results of the study in this series of 60 cases are considered by the author to be "encouraging enough to warrant continuance."

COMMENT

Endocrine gland products given by mouth are frowned upon by many eminent endocrinologists. They believe them to be inert, except when given hypodermatically. The extract of thyroid is the exception. This fact may account for the success obtained in the class of cases Doctor Elden describes.

Endocrinology is still the enigma of modern medical science.

H. B. M.

Sterilization of the Female by Coagulation of the Uterine Cornu

M. N. Hyams (*American Journal of Obstetrics and Gynecology*, 28:96-101, July, 1934) describes a method for the sterilization of women for whom pregnancy is definitely contra-indicated. He has devised an instrument and a procedure by which the uterine openings of the Fallopian tubes can be sealed by electrocoagulation; the intrauterine electrode used "conforms to the configuration of the uterus and is calibrated according to its average measurements." Before introducing this electrode the position of the uterus and the length of its cavity are determined by inserting a sound, preferably one with a flexible tip. An indifferent metal electrode is placed on the abdomen. When the instrument is introduced so that its acorn-shaped tip is fixed in the intramural opening of the Fallopian tube, the high frequency current is turned on, using a current of 200 milliamperes for five seconds. This is sufficient to coagulate and completely seal the opening; the instrument is then rotated and the other tubal opening treated. A light vaginal mercurochrome gauze packing is inserted; otherwise no after-treatment is necessary. After a month, the result is tested by transuterine insufflation or uterosalpingography; occasionally a second treatment may be necessary to seal both tubes completely. This procedure causes little or no pain and requires no anesthesia. Recently the author has used a fluoroscopic technic to permit visualization and more exact control. He has found the method very effective.

COMMENT

There are many eminently satisfactory methods for sterilizing the female via coleotomy but the Dickinson method, described by Hyams, is the only office procedure known to be permanently efficient. It is safe. It is fairly easy to perform and should be more generally employed.

H. B. M.

Treatment of Leucorrhea

A. Reich (*American Journal of Surgery*, 25:398, September, 1934) notes that the treatment of leucorrhea must necessarily be causal. If the cause of leucorrhea is a lesion of the uterus or cervix, it may be neoplastic or infectious; or, in the cervix, may result from injuries caused by childbirth. If the cause is a lesion of the vagina or vulva, it is usually due to infection. Some of the lesions causing leucorrhea may require surgical treatment. Laceration of the cervix should be repaired and infected glands destroyed by linear scarification with the electrocautery. In cases where local vaginal treatment is indicated, the following method has been found of value at the Gynecological Service of the Polyclinic Medical School and Hospital, New York. A teaspoonful of ointment consisting of *Acid salicylici*, gr. 10; *Ung. hydrarg.* U. S. P. ʒii; and *Ung. zinci* q.s. 1 oz. is rolled in a tablespoonful of granulated sugar, and the sugar and ointment introduced into the vagina, followed by a tampon. The tampon is removed in twenty-four hours, but no douche is used. The sugar and ointment "produce a sugary mixture which is highly bactericidal." It is effective for about a week; and then another treatment is given. This treatment has been found effective in gonorrhea, trichomonas vaginalis and non-specific infections.

COMMENT

That symptom leucorrhea!! As old as woman herself. What hasn't been used for its cure? Nowadays, however, the conscientious physician will first determine the cause of the leucorrhea, and then proceed with the cure. And, believe it or not, most cases can be cured—permanently.

H. B. M.

Treatment of Gonorrhea of the Cervix

S. D. Breckinridge and A. J. Whitehouse (*American Journal of Obstetrics and Gynecology*, 28:445-448, September, 1934) describe the method used for treatment of gonorrhea of the cervix in the City Venereal Disease Clinic of Lexington, Ky., where a large percentage of the female patients were prostitutes. In cases in which the cervical smears are positive for the gonococcus, local treatment of the cervix is instituted at once unless inflammatory masses are found in the pelvis. In the latter case foreign protein therapy, using sterile fat-free milk, is employed and five to ten injections given before the local treatment of the cervix is begun. For the local treatment, the electric cautery is used; in the parous cervix without extensive injury, the rodshaped tip (of the Post cautery) is placed in the canal, and the current turned on, until a narrow, white rim of "cooked" tissue appears. In a nulliparous cervix, the same procedure is used, but a smaller tip may be necessary. If the cervix is extensively injured and eroded, linear cauterization of the erosion is also done. Treatment is repeated at intervals of three weeks, smears being taken before each treatment (usually beginning with the third treatment). After the smear has become negative, patients are required to return every two weeks for follow-up smears. Of 574 patients seen in the Clinic, 261 showed cervical smears positive for gonorrhea; of these 169 were adequately treated and followed up, and 162 were cured, *i.e.*, cervical smears rendered permanently negative. The number of treatments required for cure in these cases ranged from a single treatment in a small group to eight to eleven treatments in a few refractory cases; and averaged 3.6. With this form of treatment, there was a considerable incidence of moderate stenosis of the cervix, but this was of such a degree as to require dilatation in only 18 cases.

COMMENT

A permanent cure of gonorrhea in the female is always questionable. How long is it permanent? It should mean for the life of the patient, but does it? It is very difficult to follow up clinic patients, particularly venereal disease patients. The complement fixation test of Barringer, when available, gives the best assurance of when a case is "permanently" cured. Gonorrhea of the cervix is only a part of the "whole venereal infection" story.

H. B. M.

Carcinoma of the Uterine Cervix After Radiation Therapy

H. Schmitz (*American Journal of Roentgenology*, 32:87-91, July, 1934) reports a study of end results in 398 cases of primary carcinoma of the uterine cervix treated by radiation, in relation to influence of early diagnosis on the extent of the disease and the five year good results. From this study he concludes that the extent of the growth of carcinoma of the uterine cervix is directly related to the curability rate. The time elapsed between the occurrence of the first symptom and the beginning of adequate treatment does not influence the end results of radiation therapy so directly; this is explained by the fact that all cancers grow "silently" for a time without causing symptoms. It is the freely movable, clearly localized growths that give 80 to 90 per cent. five year cures, and this type of growth can be discovered only by routine periodic health examinations. The author concludes that carcinoma of the uterine cervix is probably always preceded by a low grade chronic inflammation; the diagnosis of chronic cervicitis by follow-up examinations after infections, abortions and labors and in periodic health examinations, and its adequate treatment, will prevent the later development of cancer; if a symptomless early carcinoma is found during such examinations and adequately treated, cure may be obtained in almost every case.

COMMENT

Early diagnosis of cancer of the cervix is still the only hope of "sure" cure. Periodic health examination is the only certain way of discovering early or suspected malignancy of the cervix. Even this is not certain unless an adequate vaginal examination is made by a competent physician, who is alert to the possible presence of malignancy. Where there is doubt a biopsy should invariably be performed. Procrastination and temporizing measures often spell disaster. "Make sure" should be the slogan in all such cases.

H. B. M.

Lymphatic Leukemia and Cervix Carcinoma

Brückner (*Archiv für Gynäkologie*, 157:616-619, Aug. 18, 1934) notes that the simultaneous occurrence of leukemia and cervix carcinoma is not discussed in literature, and hence a single case is of interest. He finds only one case reported in literature, and no details in regard to it are given. In his own case the patient was a woman sixty-one years of age, who while under observation for lymphatic leukemia, developed vaginal bleeding; examination showed a carcinoma of the cervix; this was treated by radium (2,420 mg.-hours) followed by Roentgen ray irradiation; the cervical growth disappeared; and the patient's general condition improved. The radiation therapy also had a favorable effect on the leukemia, the total leucocyte count falling to normal, and lymphoblasts disappearing from the blood. At no time did the leukemia and the carcinoma appear to have an unfavorable influence on each other.

Obstetrics

Methods for Pregnancy Diagnosis

L. Davy and R. A. Nason (*American Journal of Obstetrics and Gynecology*, 28:186-196, August, 1934) report the use of various modifications of the Aschheim-Zondek test for the diagnosis of pregnancy at the Wisconsin General Hospital. In the first 100 cases in which such a test was used, there were few "problem" or doubtful cases. Since a pregnancy diagnosis test was offered as a routine laboratory service to physicians throughout the state, and a much larger number of tests have been made, there has been a relatively greater increase in the number of specimens from cases in which diagnosis was doubtful. In the more than 800 cases in which the pregnancy test has been done, a modification of the Friedman method has been used; with this modification, which is described in detail, results may be read in twenty-four hours, and an operative procedure for exposure of the ovaries permits the use of a mature rabbit for eight to twelve tests. More than 400 tests have been checked by the subsequent clinical course of the case; and the criterion for the judgment of the test is based on the correlation of the laboratory findings with the clinical data; and especially on a comparison of the ovarian picture produced by urines from normal pregnancies with that produced by urines from abnormal pregnancies and endocrinopathies in the non-pregnant. This mature rabbit test has been found the most satisfactory for the routine laboratory procedure. When the results of this test are indeterminate or unusual, the immature rabbit and the immature female rat tests are used; the final report is based on the results obtained by two agreeing tests.

COMMENT

The diagnosis of pregnancy entirely on physical findings is many times most difficult or indeed impossible. Any laboratory test, therefore, which will aid in the early and positive diagnosis, is extremely helpful to both patient and physician. The hormone test of Aschheim and Zondek, or some modification of it, is the best, surest and easiest to perform of all hitherto known pregnancy. tests. The Friedman modification of the A-Z pregnancy diagnosis test is easiest to carry out, is quite accurate and therefore is the test most commonly used. We have found the Friedman test positive in about ninety per cent. (90%) of the cases in which physical signs were insufficient for positive diagnosis. Unfortunately, like many diagnostic laboratory

aids, the test is, in many instances, performed uselessly and for mercenary purposes.

H. B. M.

Analysis of 3,301 Breech Deliveries in the Hospitals of Brooklyn, N. Y.

C. A. Gordon and his associates (*American Journal of Obstetrics and Gynecology*, 28:140-150, July, 1934) present a study of 3,301 breech deliveries in the hospitals of Brooklyn, N. Y., during 1926-1930—a survey made for the Brooklyn Gynecological Society. There were 21 maternal deaths in the entire series of 3,301 deliveries. The cases studied included 302 with premature fetuses, 53 with serious congenital defects, 40 with macerated fetuses, and 230 cases of multiple pregnancy in which 290 fetuses presented by the breech. A special study of the management of labor was made in 2,601 cases in which the fetus weighed 2,500 gm. or over. In 1,597 of these cases delivery was spontaneous or "assisted"; in this group the fetal mortality was 6.7 per cent., and 32 babies (2 per cent.) suffered some birth injury. There were 555 cases in which extraction was done with a fetal mortality rate of 18.7 per cent., and injury in 5 per cent. In 405 cases in which the breech was broken up, the fetal mortality rate was 28.9 per cent., and 9.9 per cent. were injured. There were 44 cases in which Cesarean section was done, with a fetal mortality of 0.45 per cent. and a maternal mortality of 11.4 per cent. There were 172 patients with abnormal pelves, and 94 with a history of previous breech presentation. The fetal mortality in 163 primiparas over thirty years of age, and in 540 cases in which the fetus weighed more than 4,000 gm., was closely approximate to the average fetal mortality for the entire series. In 97 cases with prolapse of the cord, the fetal mortality was 46.4 per cent. The fetal mortality for the entire series of 3,301 deliveries was 20.3 per cent., but excluding premature and macerated fetuses, those with serious congenital defects and twins, the fetal death rate was 12.6 per cent. In 61 per cent. of these cases delivery was spontaneous or with some assistance; fetal mortality and injury increased with extraction and was highest when the breech was broken up.

COMMENT

Breech delivery has always been more or less dreaded by all practitioners, including the specialist in obstetrics. A study, therefore, of a large series of 3301 cases is very valuable. A 12.6 per cent. mortality rate is very excellent and shows Brooklyn has some very sane obstetricians.

H. B. M.

The Narrow Bispinous Diameter and the Persistent Occipitoposterior Position

S. Hanson (*Surgery, Gynecology and Obstetrics*, 59:102-105, July, 1934) reports that in 2,254 pregnant women, 811 of whom were primiparae, the bispinous diameter was measured. Pelves in which this diameter measured 9.5 cm. or less were classed as narrow; there were 143 primiparae that showed a narrow bispinous diameter according to this classification. Among the 811 primiparae there were 38 cases with persistent occipitoposterior position; in 27 of these (or 71 per cent.), the bispinous diameter was narrow; and in only one of the 38 cases was this diameter over 10.5 cm. The incidence of the persistent posterior position in the 143 primiparae with narrow bispinous diameters was 18.9 per cent., almost thirteen times that in primiparae with normal bispinous diameters. The author concludes that in primiparae with narrow bispinous diameters, the persistence of a posterior position may be anticipated early in labor; and operative intervention instituted under the most favorable circumstances. In multiparae, this does not hold true, probably due to the effect of the relaxed perineum.

COMMENT

The diagnosis of occiput posterior position should always be made as early as possible in labor. The vast majority will rotate spontaneously in due course of time, provided there is no disproportion. Occasionally, but particularly in the primipara with narrowed bispinous diameter, rotation will not be expected to occur and hence early correction is indicated. Pelvic measurements are absolutely essential for every pregnant woman.

H. B. M.

Various Kidney Function Tests in Relation to the Toxemias of Pregnancy

J. F. Cadden and C. M. McLane (*Surgery, Gynecology and Obstetrics*, 59:177-184, August, 1934) note that it is important that the obstetrician should recognize kidney impairment in pregnancy as early as possible; they have accordingly made a study of various kidney function tests to determine which, if any, of these tests are sufficiently sensitive to differentiate the different types of toxemias of pregnancy and indicate true nephritic toxemia. The phenosulphonephthalein, the creatinine excretion and the urea clearance tests were made in 23 cases of normal pregnancy, 216 cases of low reserve kidney, 28 cases of pre-eclampsia and 9 cases of eclampsia. It was found that of the three tests used, only the urea clearance test was of sufficient sensitivity to differentiate chronic nephritis from the other toxemias of pregnancy. The findings showed that in normal pregnancy the average urea clearance values were above normal, even in the latter part of the pregnancy; the average urea clearance values in the cases of low reserve kidney, pre-eclampsia and eclampsia were within normal limits (slightly over 100 per cent. normal), but lower than in normal pregnancy. Only in chronic nephritis were the average urea clearance values below normal, 75 per cent. normal antepartum and 68 per cent. normal postpartum; 50 per cent. of all patients with chronic nephritis showed urea clearance values below 70 per cent. normal. No apparent relationship was found between blood pressure and renal function as measured by the urea clearance test in this series. The authors conclude that the urea clearance test is the most sensitive method for the recognition of early or mild nephritis in pregnancy; it is essential that repeated two hour tests be made to establish the diagnosis.

COMMENT

Chronic nephritis is a grave and not uncommon complication of pregnancy. It is most difficult to diagnose in its early stages. If the diagnosis can be made early, prophylactic measures may avert a calamity to mother and/or fetus. All kidney function tests are complicated but should be done when indicated. Irreparable kidney damage is certain to result when the diagnosis is neglected.

H. B. M.

Nonconvulsive Toxemias in Late Pregnancy

O. H. Schwarz (*American Journal of Obstetrics and Gynecology*, 28:334-338, September, 1934) is convinced from his own experience at the St. Louis Maternity Hospital and its prenatal clinic, that prophylaxis is most important in controlling the toxemias of late pregnancy. In the prenatal clinic where the patients are under careful observation the fulminating type of eclampsia seldom develops. If a late toxemia does develop it is of the low reserve kidney type, pre-eclampsia or nephritic toxemia. In these cases, the author believes, too prolonged conservative treatment is apt to result in permanent damage to the kidney function. In the last four years, he has made it a practice to induce labor in cases of nonconvulsive toxemia in late pregnancy that do not respond quickly to conservative treatment. Induction of labor was done in 21 out of 50 such cases with a blood pressure of 190 to 200, but in only 22 out of 97 cases in which the blood pressure did not exceed 170. If conservative treatment fails, a bag or bougie is used in most cases; the danger of infection with this method is overcome by the use of vaginal instillations before and after the procedure. In the series of cases reported infundin was used "rather freely" as an aid to the induction of labor and without any apparent untoward effects. This leads the author to question the theory advanced by Anselmino, Hoffman and Kennedy (1932) that the posterior pituitary plays a part in the etiology of the late toxemias of pregnancy. In the series of 231 cases treated in the four year period, there was only one maternal death; the total fetal mor-

tality was 12 per cent., but the "viable fetal mortality," 3 per cent.

Edema of the Cervix in Labor

V. Cathala and S. Seydel (*Gynécologie et Obstétrique*, 30:1-14, July, 1934) report that in the Maternity service of Hôpital St. Louis, there were 42,608 deliveries in the last 10 years; edema of the cervix was recorded in 95 cases; and the authors are of the opinion that a lesser degree of edema occurred more frequently without being noticed. Edema with rigidity was less frequent than simple edema. A study of the pathological changes in the cervix was made in 11 cases of simple edema, and 3 cases of edema with rigidity. The simple type of edema occurred in women with flat pelves; edema with rigidity occurred with generally contracted pelves. But the authors' study of the pathology has led them to conclude that whatever the type of the edema, it is a mechanical edema produced by the compression of the cervix between the fetal parts and the pelvic bones.

Medical Ethics and New Methods of Practice

Gradual changes in the nature of our civilization have brought ever more complex problems for solution by the medical profession. As has been stated repeatedly in these columns, the ethical principles which guide medicine are fundamentally so sound that they may be adapted to any situation arising in medical practice, provided those concerned wish to observe the spirit of these principles. Nevertheless, physicians involved in new types of organization, such as contract practice, industrial practice, hospital practice, university practice and the practice of medicine by lay corporations which employ physicians, have been brought before the judicial councils and committees on ethical relations of various medical bodies, because of infringements of these ethical principles. In some cases there have apparently been difficulties of interpretation. To overcome these difficulties, the Judicial Council of the American Medical Association, at the Cleveland session, presented three amendments to the Principles of Medical Ethics. These were heartly endorsed by the Reference Committee on Amendments to the Constitution and By-Laws and then adopted by the House of Delegates as guiding principles for organized medicine.

The term "contract practice" is anathema to the vast majority of individual practitioners in this country, yet contracts of all kinds are matters of daily life in all forms of industry. Conceivably there are situations in which the practice of medicine under a contract may be necessary or desirable. In order to elucidate this phase of medical practice, the Principles of Medical Ethics, Chapter II, article V, section 2, is now amended by addition of the following wording:

By the term "contract practice" as applied to medicine is meant the carrying out of an agreement between a physician or a group of physicians, as principals or agents, and a corporation, organization or individual, to furnish partial or full medical services to a group or class of individuals for a definite sum or a fixed rate per capita.

Contract practice per se is not unethical. However, certain features or conditions if present make a contract unethical, among which are: 1. When there is solicitation of patients, directly or indirectly. 2. When there is underbidding to secure the contract. 3. When the compensation is inadequate to assure good medical service. 4. When there is interference with reasonable competition in a community. 5. When free choice of a physician is prevented. 6. When the conditions of employment make it impossible to render adequate service to the patients. 7. When the contract because of any of its provisions or practical results is contrary to sound public policy.

Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole.

Group practice and clinical practice are also phases of medical work that have aroused opposition in many communities, because of the introduction of advertising methods and commercial promotion into their work. In some places groups or clinics have employed business managers, unfamiliar with the medical point of view, who have attempted to introduce unprofessional methods into medical practice. In order to establish the proper relationship between groups and clinics with the individual practice of medicine, the Principles of Medical Ethics will not contain the following statement:

The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual doctors, each of whom, whether employer, employee or partner, is subject to the principles of ethics herein elaborated the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession.

Regardless however, of the damage wrought to scientific medicine by physicians who engage in contract practice or by groups of physicians competing with the individual practitioner, the worst possible type of new methods in medical practice is the incorporation by business men of organizations to engage in the practice of medicine, employing physicians on salaries and exploiting the services of these physicians unethically to the public. The most conspicuous example of such an organization is the United Medical Service, Inc., which began a few years ago to advertise its services to the people of Chicago. Regarding such types of medical practice, the Judicial Council was definite. The Principles of Medical Ethics now contains the following statement:

It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy.

As was stated in the introduction to these comments, these modifications of the Principles of Medical Ethics do not in any way modify the basic character of these principles. The Principles of Medical Ethics was established for the protection of the public primarily. Methods of promotion that sell medical practice on the basis of exaggerated claims, on a fee basis rather than the quality of service rendered, methods of practice that break down the intimate personal relationship that must exist between doctor and patient; methods that delegate the responsibility of the attending doctor to a group or a corporation or a business manager, carry with them a menace to the life and health of the people who are served.

Physicians will do well to familiarize themselves with these new statements of principle, now a part of the ethics of organized medicine. The young physician who is tempted by the offer of some commercial agency to enter into such schemes or combinations should bear in mind that he thereby jeopardizes his entire future in the practice of medicine and sacrifices the medical birthright for which he has already paid six or seven years of his life. —J. A. M. A., July 28, 1934.

Sources of Ultraviolet and Infra-Red Radiation Used in Therapy: Physical Characteristics

W. W. Coblentz, Washington, D. C. (*Journal A. M. A.*, July 28, 1934), states that in general the lamps submitted to the Council on Physical Therapy have an intensity that is several times the minimum requirements tabulated. The operating distance and the time of exposure to a given type of lamp are specified by the manufacturer. In the newer lamps such as the G-type glow lamp, the first productions did not comply with the specifications, but these lamps were promptly improved to meet competition with other types. In general, the specifications by the Council have tended to improve the output of responsible lamp manufacturers, but at present there seems to be no means to prevent the exploitation of the public by the sale of cheap lamps emitting little or no ultraviolet radiation.

Editorials

Professor Milquetoast

The medical Brahmin who works in his ivory tower (hospital) and does not deign to visit a patient seized in his home with colic or what not, or to respond as consultant to the call of his colleagues in the field, is a curious phenomenon in modern medicine. In his case a preposterous phase of medicine has been reached. We sometimes wonder whether there is a failure to respond even in the case of the millionaire patron.

Of course, we are thinking of the giants of the past. The old spell lingers. We can not love the full-time, abrahamflexnerized pundit — too often, anyway, a one-disease surgeon or internist.

The Twilight of the Gods

"Science is glorious," says Haggard, "but it is not medicine."

Today, the art of medicine is under an eclipse. Medicine is largely in the hands of scientists, rather than artists.

A considerable factor in bringing about the present condition of affairs is institutional practice. One can not apply the intimate art of medicine in a hospital ward or room; it is a totally wrong milieu.

And art takes time—much more time than science. We have fatuously thought of the psychoanalyst, with his time-consuming methods, as the champion time user. But the medical artist, Weir Mitchell, gave much more time to individuals, over the years, than any psychoanalyst.

At one vital point of contact the surgeon is at a disadvantage. During his most intensive and intimate approach to his patient the latter is unconscious; and then, perhaps, an assistant takes over the dressings and after-care. What chance for the art of medicine there? Yet we have known surgeons who were great artists in a plenary degree.

Proponents of things like socialization would not know what we are talking about. It is the decline of the art of medicine that has given these advocates their greatest impetus; and a people who can not comprehend, demand and utilize an art of medicine are ready for socialization. Charge this against science.

In these degenerate days the old laconism is reversed: when the half-gods arrive the gods go.

The Curse of Unnecessary Noise

In London a rigidly enforced ordinance now protects sleepers against the noises that curse most modern cities. We wonder whether civilization has also reached a point here when we can expect similar action? The London precedent gives us hope.

Since writing the above paragraph we have learned that other English cities are rapidly falling into line in this matter.

Average Credit Ratings

It would be a good idea for physicians and hospitals to analyze Professor P. D. Converse's (University of Illinois) report on a large number of credit men.

The original ratings, compiled by Professor Converse, have been rearranged by the National Association of Finance Companies, giving a percentage basis—100 representing the highest possible rating. This diagram gives about 34 occupations.

From the chart it is apparent that doctors pay better than most others. Truck drivers, painters and decorators seem to be at the bottom of the list.

M. W. T.

Geographic Medicine

Hobbies in methods and technics are very evident within the domain of medicine. A man leaving the purlieus of Baltimore and entering the New York district will at once be struck by the intensive employment here of hypertonic glucose; he has seen no such fervent utilization of it in the Maryland city.

So one will find a kind of natural habitat for such practices as thyroidectomy in certain cardiacs or sympathetic nerve surgery in various painful syndromes. It is hardly necessary to particularize.

Here we have a theme—geographic medicine—

which might be expanded into a considerable essay.

We have to take it for granted that all these hobbies are pursued rationally and never as ends in themselves—that they never tend to fall into high-hat ritual.

Our Non-Logical Society

Out of Switzerland and Italy has come a new philosophy which apparently explains our cockeyed society. Such a philosophy, that of Vilfredo Pareto, formerly of the University of Lausanne, is sadly needed. It "explains the differences between fact and sentiment, deed and word, between what men say they are doing and what they actually do in spite of themselves." Through it we can understant "racial persecutions, national manias, and even the present plight of democratic states." It takes nothing on faith but seeks the real forces beneath "non-logical" superficialities. Pretty nearly everything we do in group fashion is masked in a welter of disguises. Our idealogies and systems are "window dressing" bearing little relation to the realities underneath.

"He (Pareto) saw that political bodies often professed one thing and did another; that nations which could reason competently often went completely against reason in their political dealings; he saw that enlightened nations often moved toward obscure and irrational ends; therefore he differentiated between appearance and reality; between the waters that are visible and the currents that run deep in the stream of human life" (Hansen).

Understand the deep-seated instincts and you will understand all: "devotion to family and place, religion, caste, nationality and habits handed down through years in one group" (Hansen).

At last we have a philosophy which grapples clearly with illogical social phenomena, which explains why we arm most heavily when we most crave peace, why we hate the thing that we profess to love (for example, individualism), why we exploit our fellows in the name of all the decencies—why we postpone and resist, say in medicine, destinations that we blatantly set as our goal. And economic determinism, says Pareto, has little to do with it all.

It is even possible that in Pareto we might find a reason for our failure to master cancer.

The Ogino-Knaus Contribution

The five inclusive days from the twelfth to the sixteenth day before a subsequent menstruation is the period of ovulation and therefore the period during which fertilization is most likely to occur. By placing three more days before this "unsafe period" (thus taking into account the ability of the spermatozoa to live three days after discharge into the female genital tract) one is enabled to fix the range of sterile and unsterile days in menstrual cycles of varying length.

The *Journal of the American Medical Association*, in an editorial on September 8th, 1934, said, with respect to natural birth control based upon the foregoing principles: "Enough evidence has already been established to indicate that strict observance of the method is assurance of sterility, even beyond that associated with the employment of most contraceptive appliances and medicaments."

We Once Had A Name for It

Another paternalistic movement is said to be sweeping the West. This is the plan, said to have originated in the mind of a physician, to pension everyone over sixty $200 a month, provided all the money is spent at once. It sounds like another bootstrap scheme. Which reminds us of that disorder of the mind that once upon a time went by the name of paranoia reformatoria. Today the affliction is widespread, yet the term is no longer heard.

Miscellany

Physicians Equity Association

The Physicians Equity Association of America, Inc., solicits your interest for the following reasons:

1. The founders and present officers represent no group, clique, religion or political belief.
2. It is an Association devoted exclusively to the Economics of Medicine.
3. It aims to strive, with becoming dignity, for reasonable compensation to the physician for every professional service rendered.
4. This promise it means to accomplish by:
   a. Exposing and fighting all abuses of our traditional willingness to render free service to the indigent sick.
   b. Protecting the public by removing from the profession all unqualified healers.
   c. Opposing such legislation as tends to legalize the irregular practitioner.
   d. Defending professional traditions from all other legislative infringements of our medical rights.
5. The Physicians Equity Association has obtained the first Charter granted to physicians exclusively for a Physicians Credit Union—a cooperative bank under State supervision for the exclusive use of doctors, to deposit in and borrow from.

The Physicians Equity Association must in time become the fountain head whence springs the most matured and reasoned judgments on medical economics; the nucleus of subsidiary economic agencies designed to assist and to lighten the economic burdens of the practicing physician.

Can you, fellow doctor, afford to stand in the way of its becoming so?

The three dollars ($3.00) membership dues and your active support of this movement will help! Don't hinder! Join at once!

Officers—Robert Emmet Walsh, M. D., President; Judson C. Fisher, M. D., Vice-President; Seymour Fiske, M. D., Secretary; William M. Cooper, M. D., Treasurer.

Members of the Council—William E. Butler, M. D.; Malcolm Campbell, M. D.; William M. Cooper, M. D.; Joseph E. Conroy, M. D.; Cassius L. DeVictoria, M. D.; Edward R. Cuniffe, M. D.; Andrew A. Eggston, M. D.; Joseph J. Eller, M. D.; Judson C. Fisher, M. D.; Seymour Fiske, M. D.; Charles Goodman, M. D.; Harold M. Hays, M. D.; Samuel M. Kaufman, M. D.; Locke L. MacKenzie, M. D.; Alexander Nicoll, M. D.; Herman B. Philips, M. D.; Joseph Safian, M. D.; Herman Sharlit, M. D.; Clarence Smith, M. D.; Robert Emmet, Walsh, M. D.

Correspondence

From our Washington Correspondent

The A. M. A. Versus Federal Relief

Our representatives (not in Congress) have boldly and with clear vision turned down the suggestion to interfere with our own business in the case of our patients. Washington abounds in gestures, and magazines teem with advice from college professors, from the clergy and from Congressmen who love to hear themselves talk. We recall the answer of Hamlet when asked what course of reading he was pursuing—"Words, words."

State rights are recognized and approved, why not those of a profession devoted to the care of the sick and suffering in mind and body? Why, we have been freely giving our time and skill to this the noblest altruism for thousands of years, especially in these days of stress.

Straight before us is the line of duty, in peace and war, and we never have shirked. Let our own community and State help us, *not* Washington with its hectic "merry-go-round," which is not only amusing, but tragic.

Let the doctors alone. They can manage their own business.

H. C. C.

Chinese Quarter Versus Park Avenue

September 26, 1934.

To the Editor of the MEDICAL TIMES:

In your editorial of September, 1934, page 295, "Chinese Quarter Versus Park Avenue," you attributed the low death rate of puerperal origin to "simple and unmeddlesome obstetrics."

If the Editor was anywhere near a serious mood when he quoted "all a man needs on an obstetrical case is some umbilical tape and a good cigar," those of us who do not smoke are seriously handicapped as obstetricians. In self defense as a non-smoker, I would like to remind the editor that Kinoshita of Tokio (quoted by Williams) states that both the pelvic and cephalic measurements fall below the average observed in European and American white women. The late Dr. Williams also mentioned that their heads were more moldable. In discussing this with a Japanese colleague who informs me that he delivers about 90% of the Japanese women confined in New York City, I was told that the average weight of a Japanese new-born is five to six and a half pounds, while the pelvic measurements though slightly smaller are still within our normal limits.

A local Chinese physician informs me that the vast majority of Chinese babies are so listed because of the father. The mothers of these babies are usually American for the simple reason that there are not sufficient Chinese women. This statement was confirmed by a personal communication from a Department of Health official. If this is a fact, and if as usual the baby's head is not out of proportion to its weight, why should there be dystocia?

It therefore is quite evident that these factors account to a not inconsiderable degree for the favorable results.

Yours truly,

755 Ocean Avenue,
Brooklyn, N. Y.

HYMAN STRAUSS.

Does Unorthodox Medical Individualism Serve Any Useful Purpose?

September 28, 1934.

To the Editor of the MEDICAL TIMES:

Having read your editorial on Individualism in the September issue of the MEDICAL TIMES, I wish to take issue with you on some of the implications contained therein, especially that the individualist in medicine must of necessity be an "irregular" or a "charlatan," or, for any reason, comparable to the prostitute and her profession, whether of the past or the present.

An "Individualist" is "One who acts or thinks independently or with individuality." I construe this as referring to those individuals who have original ideas on any subject, and because they *are* original, differing from the usual conception of the matter under consideration. If such ideas emanate from an unknown person, and he is not successful in securing a patron or a sponsor—or a good press agent, if he is persistent in advancing his new ideas—he is looked upon as an "individualist," a charlatan, a self-seeker, however great may be the merit of his idea, or invention.

The best known instance of real individualism in medicine is the case of Dr. Edward Jenner, the discoverer of vaccination for the prevention of smallpox. He *was* an individualist: and his findings were derided and ridiculed by the members of the medical profession for many years; but his persistence finally won recognition for his epoch-making discovery, and after more than fifty years they ceased to dub him "charlatan" and accepted his findings. Is it meet to compare him, in any way, with the whores of the world? Or Dr. Graham, whose sole sin was being ahead of his time?

The greatest "individualist" of modern times was, in my opinion, Thomas A. Edison: but because of the practicability of his inventions, and the possibility of immediately demonstrating their worth by merely showing them—possible with few if any new medical findings—he was kept out of this class. But he WAS an individualist, if ever there was one.

Individualism, originality, inventiveness, are easily demonstrable when one is blessed with the proper backing. How long would it have taken for the recognition of the value of antitoxin for the cure and prevention of diphtheria if the discoverer had done this work alone, even if he had cured all the cases treated and prevented its occurrence in every case where a protective dose was given? The doubting Thomases would have shaken their heads and said: "Who is he? We know that diphtheria takes a toll of over forty per cent of the cases, and that isolation is the only preventive. No one has ever cured diphtheria." But fortunately for the world, these discoveries were made under the most favorable conditions and recognition was immediate.

There are, without a doubt, individualists in our midst who remain unknown, and their ideas unrecognized, because of their inability, for one reason or another, to present these ideas before the proper tribunal. Who can estimate the good that might come from a full knowledge of the value of the findings of these unknown "individualists"? Because of this lack of ability to place their findings before their fellow-men in the accepted, conventional manner, they are branded as cranks, as charlatans, as self-seekers, as rainbow-chasers, and they remain—they live and die—"individualists," and the world is deprived of whatever good might eventuate from the recognition of their findings and discoveries.

What better opportunity is there for the philanthro-

Seifert & Mueller—PHYSICAL AND CLINICAL DIAGNOSIS

New Second Edition

American medical students, interns and practitioners will be very grateful to Dr. Andrus for making this outstanding work available in English. The student who has had a course in lectures on physical diagnosis and clinical microscopy will find this little book all that he usually needs to consult in his work on the wards. The practitioner of medicine with a copy on his desk will rarely need to dig deeply in his library.

By Otto Seifert, Professor of Medicine, Wuerzburg, and Dr. Friedrich Mueller, Professor of Medicine, Munich. Authorized translation by Dr. E. Cowles Andrus, Associate in Medicine, Johns Hopkins University. Crown octavo. 556 pages. 140 illustrations. 3 colored inserts. Keratol, $6.00.

J. B. LIPPINCOTT COMPANY

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pist than to seek out these unattached "individualists," study their claims, their findings, and if found tenable, to sponsor their efforts for recognition. Every unattached "individualist" who is not blessed with an abundance of wealth knows that with the making known of his findings, he has a fight on his hands, whether these findings are in the field of science, economics, mechanics or medicine.

"Individualism" and "Charlatanism" are as far apart as are the poles of the earth. The individualist, as such, has original ideas, which may or may not be meritorious, but they are honest—the children of his brain. The charlatan is out to fool the public, solely for his own personal gain.

Sincerely yours,
William Grant Lewi, M. D.

Medical Arts Building,
57 West 57th Street,
New York City.

Mental Hygiene in Russia

To the Editor of the Medical Times:

It would interest a great many readers of your publication to know just who was the inspired reviewer of Dr. Frankwood E. Williams' impression of the improvement in neuro-psychiatric health of the present Russian people. It could not have been a modern psychologist else he would have been more acutely aware of his own reasoning as implied by his poorly hidden skepticism.

Your reviewer doubts that economic security and freedom in matters of sex will make for a healthier mental state. Even the present day opponents of dynamic psychology as interpreted by either Freud or Adler will unite on that basis. If not economic security and freedom of sex matters what does make for mental maladjustment and anti-social tendencies?

Then forward comes the astounding theory by your reviewer that the terrific mental and physical costs of the five year plan would counteract any good that may have come from economic security, et al. Why need one display such elementary ignorance in a scientific publication? Surely there are now sufficient published and authentic documents available for one to know all about the initiation and achievements of the five year plan. Besides, does your anonymous misinterpreter believe that a plan inspired by a great mass of people for the benefit of the people and built around the idealogy of future success for the majority create "potent neuropsychiatric factors?" That would put him in the anachronous position of a critic of the Soviet idea decrying ambition!

The reviewer's culminating glory lies in the implied low mass intelligence of the Russian people as being a factor for Dr. Williams' statistics. To take the edge off this raw statement the possible present "joys" of the German people under Hitler are compared to the regimented enthusiasm of the Russian people. All that can be said to such a vicious slam at both nationalities is that the same ignorance is displayed regarding the history of German Fascism as about the proletarian dictatorship.

Your reviewer, Mr. Editor, was entirely too obvious. Else he would not have ended his remarks with—"not mere prejudice, for we wish Russia well." Defense mechanism?

Harry E. Beller

Brooklyn, N. Y., October 8, 1934

INVITATION

To the Medical Profession of America:

The Inter-State Postgraduate Medical Association of North America extends a very cordial invitation to all physicians in good standing to attend the International Assembly of the Association, to be held in the city of Philadelphia, Pennsylvania, November 5 to 9, inclusive, 1934.

An unusually interesting clinical and didactic program including all branches of Medicine and Surgeries and the Specialties, has been arranged by the Program Committee.

In co-operation with the Eastern Post Graduate Medical Association, The Medical Society of the State of Pennsylvania, and The Philadelphia County Medical Society, and with the active support of the Philadelphia Convention Bureau and Philadelphia Chamber of Commerce, a most excellent opportunity for an intensive week of postgraduate medical instruction is offered by a very large group of acknowledged leaders in the profession.

John M. T. Finney, M.D., President
George W. Crile, M.D., Chairman, Program Com.
William B. Peck, M.D., Managing-Director
Tom B. Throckmorton, M.D., Secretary
Arthur G. Sullivan, M.D., Director of Exhibits
Henry G. Langworthy, M.D., Treasurer and Director of Foundation Fund.

Excerpt from Code of Fair Competition for the SURGICAL DISTRIBUTORS' TRADE

As Approved August 24, 1934

Article VIII—Trade Practices

Section 1. No member of the trade shall give, permit to be given, or offer to give, anything of value for the purpose of influencing or rewarding the action of any employee, agent or representative of another in relation to the business of the employer of such employee, the principal of such agent, or the represented party, without the knowledge of such employer, principal or party. Commercial bribery provisions shall not be construed to prohibit free and general distribution of articles commonly used for advertising except so far as such articles are actually used for commercial bribery as hereinabove defined.

(a) For the purposes of this Section, physicians, surgeons, and other professional men and women shall be considered agents or representatives of their patients and /or clients when they offer or recommend the purchase of products of this trade.

MEDICAL BOOK NEWS

Edited by TASKER HOWARD, M.D.,

All books for review and communications concerning Book News should be addressed to the Editor of this department 1313 Bedford Avenue, Brooklyn, New York.

November, 1934

CLASSICAL PARAGRAPHS

It never was of disservice but rather of great service more than once, to call these things in question which seemed most evident.

Gerhard van Swieten: *Commentaries on Boerhaave. Vol. 27. English Edition, Edinburgh, 1776.*

REVIEWS

Diabetes

A PRIMER FOR DIABETIC PATIENTS. By Russell M. Wilder, M.D. Fifth Edition. Philadelphia, W. B. Saunders Company, 1934. 172 pages, illustrated. 12mo. Cloth, $1.75.

About every three years Dr. Russell M. Wilder of the University of Minnesota revises his "Primer for Diabetic Patients." This most recent revision is designed as a complement to medical supervision and includes an elementary chapter on Diet planning for the physician, as well as numerous helpful hints as to what may be done in emergencies. A food nomogram and "standard" diets are appended.

DAVID GLUSKER.

Bacteriology

A TEXT BOOK OF BACTERIOLOGY. Seventh Edition. By Hans Zinsser, M.D., and Stanhope Bayne-Jones, M.D. New York, D. Appleton-Century Company [c. 1934]. 1226 pages, illustrated. 8vo. Cloth, $8.00.

This textbook, first published in 1910 and reprinted through six editions by 1927, has been completely revised and enlarged. Many changes appear, but the exceptionally readable style and sequence has been preserved.

The 200-page extension of this edition is not out of proportion to the rapidly developing field, and does not fully illustrate the added material. In fact, it was found necessary to eliminate completely the section relating to the bacteriology of air, soil, water and milk, and to abridge the section on protozoa to a diagnostic summary. All chapters have been completely revised and fifteen more added. Previous chapters meriting segregation appear as new sections: Ricksettia Diseases, Spirochetes, and Technical Methods of Bacteriology, Immunology, and Serology.

In such a standard work as this, it is impossible to elaborate subjects for special mention. The photographic reproductions show much improvement compared with the last edition. The re-arrangement of references following a chapter rather than as heretofore appearing as footnotes may be regarded as advantageous. Only a single error of proof reading was detected, in the preface; and is only mentioned as a "disciple" for "discipline."

Despite the various specialized fields of bacteriology, the aim has been true in providing a volume for the preclinical student and non-technical practitioner as well as for the expert bacteriologist.

IRVING M. DERBY.

About Words—

A PRACTICAL MEDICAL DICTIONARY. By Thomas L. Stedman, M.D. Twelfth Edition. Baltimore, William Wood & Company, 1933. 1256 pages, illustrated. 8vo. Cloth, $7.50, thumb indexed.

A new edition of this scholarly book was necessitated by the very rapid growth of medical terms in these rapidly changing times. As the author points out, the last three years has seen the addition of more than a word a day to the vocabulary of medicine and the allied sciences. Thus about one thousand new titles besides many new subtitles have been incorporated in the book. New terms suggested by the Committee on Nomenclature of the German Anatomical Society in its preliminary report have been inserted. The book is larger by only about thirty pages, being, as always, easy to handle. To the physician this dictionary is not only extremely useful, but is fascinating reading as well. When it is picked up to look up some word, it is hard to put down. One term after another catches the eye and tempts the reader on, to pick up some bit of information, to recall some old acquaintance, or make a new one. First, though, the word will be there, with its origin, its pronounciation, its meaning, and perhaps a bit more informaton about the thing it stands for. It is a fine dictionary.

TASKER HOWARD.

Gastro-Intestinal Tract

RADIOLOGIC EXPLORATION OF THE MUCOSA OF THE GASTRO-INTESTINAL TRACT. By The Cole Collaborators. St. Paul, Minnesota, The Bruce Publishing Company, 1934. 336 pages, illustrated. 4to. Cloth, $7.50.

This book begins with an historical review of roentgen diagnosis of the gastro-intestinal tract, taking into account the long dispute between those who believe in "symptom complexes", and those who fought for the delineation of pathological lesions. The discussion of the technique for

gastro-intestinal examinations is very complete, giving not only Cole's own methods based on an experience of twenty-five years in this particular line of diagnosis but also describing the techniques used by others.

The chapter on anatomy of the gastro-intestinal tract is rather unusual in a work of this type because of the full descriptions given and the numerous illustrations.

Cole's thesis is based on his idea that there are four fundamental findings upon which one must rely for the diagnosis of pathology: 1. Change of contour; 2. Mucosal folds; 3. Pliability of the wall; 4. Mucosal pattern.

A careful study of these points as described by the author is extremely helpful in rendering a diagnosis.

To your reviewer there is too much disparaging discussion of the technique and views of other roentgenologists, notably Berg, Akerlund and Forssell. It also seems that there is too much repetition in reference to Cole's early work. It is to be regretted that a book which represents so much thought and labor should be so largely argumentative and controversial. While the subject of the work is "Radiologic Exploration of the Mucosa of the Gastro-Intestinal Tract" only a small portion of the book is devoted to that subject.

CHARLES EASTMOND.

Psychology

DEVELOPMENTAL PSYCHOLOGY. An Introduction to the Study of Human Behavior. By Florence L. Goodenough. New York, D. Appleton-Century Company [c. 1934]. 619 pages, illustrated. 8vo. Cloth, $3.00.

The purpose of this book is to outline the development of human behavior. In the opening chapters there is a discussion of the hereditary factors concerned with human behavior. Particularly interesting is the subject of twins. Great importance is attached to the prenatal period in development because it is demonstrated that both mental and physical growth proceed in an orderly manner which is determined by the interaction of the cellular tissue and the enviroment in which the cells find themselves. There are interesting chapters on the child at birth, the physical growth and motor development of the infant and emotional behavior in infancy. The remainder of the book is devoted to a study of the various periods of life through old age.

This book is so comprehensive that no review can do justice to the mass of information contained in it. It is the finest work in its field that this reviewer has had opportunity to read. We recommend it highly to the profession.

STANLEY S. LAMM

Birth Control

BIRTH CONTROL IN PRACTICE. Analysis of Ten Thousand Case Histories of the Birth Control Clinical Research Bureau. Text and tables by Marie E. Kopp, Ph.D. Prepared under the supervision of a scientific Advisory Committee. New York, Robert M. McBride & Company [c. 1933]. 290 pages. 8vo. Cloth, $3.75.

In this volume is presented an analysis of ten thousand case histories of the Birth Control Clinical Research Bureau, prepared, it is stated, under the supervision of a Scientific Advisory Committee composed of outstanding representatives of science and the practice of medicine. That the method of segregation and tabulation of this vast material is well done there can be no argument. That the scientific interpretation of much of the data is questionable there can be no doubt for the author very frankly states in her summary that "concerning health findings in this report, it should always be borne in mind that such findings do not pretend to be complete or wholly dependable." Naturally this must be true when much, and in some cases all of the information was based solely on statements of the patient. Not very scientific to say the least.

Furthermore we note throughout the Report's tables, compilations, computations and analyses a fundamental lack of specific data relative to the length of time a given observation was made. However in such a large clinic of a very heterogeneous clientele, manned by purely clinical observers we would not expect highly scientific results.

Take for example the statement that of 7,361 women more than one quarter have used "protective" measures for one year or longer, while nearly one-half this group have used them less than one year. These periods of time are of course very short compared to the childbearing life of the woman and therefore are not of much value from a scientific statistical point of view. What happened over a 10 or 20 year period? Again we are told that certain contraceptive measures were utilized by 5,450 women who were "protected" 93.3% of the times. But for how long a period of time? Likewise "in every 1,000 pregnancies, 287 terminated before the 28th week of gestation with spontaneous termination in 90% and intentional interruption in 20% of all pregnancies." These are worthwhile facts but they cannot be relied upon because they were taken wholly from the patients' own statements many of whom were admittedly of sub-normal intelligence.

Nevertheless much of the data as tabulated and analyzed is of very great value and certainly justifies the effort. Birth Control is a real problem nowadays and it behooves every practicing Physician to face this fact and get prepared.

This work opens up the frontier of practical birth control. It outlines methods, although not always along scientific lines, that those who are called upon to give advice may follow the same path, steering clear of the pitfalls of a very old medical problem that is today fast becoming "popularized" and therefore more than ever, needs the sane scientific guidance of the medical profession.

H. B. MATTHEWS.

Nutrition

THE FOUNDATIONS OF NUTRITION. By Mary Swartz Rose, Ph.D. Revised Edition. New York, The Macmillan Company, 1933. 630 pages, illustrated. 12mo. Cloth, $3.00.

This is a revised edition of Dr. Mary Rose's text-book used in Teachers College of Columbia University. More than 100 pages have been added concerning chiefly newer knowledge of the Vitamins. The subjects are presented simply and factually. Adequate general bibliographies are appended to each chapter. The text serves as an excellent introduction to the subject.

DAVID GLUSKER.

Clinical Medicine

CLINICAL MISCELLANY. The Mary Imogene Bassett Hospital, Cooperstown, N. Y. Volume 1, 1934. Springfield, Ill., Charles C. Thomas [c. 1934]. 206 pages, illustrated. Cloth, $3.00.

This volume of two hundred pages is an able presentation of reports of various conditions which have been treated by the staff at The Mary Imogene Bassett Hospital, Cooperstown, New York. Twenty-two papers are included in this collection and each one is a carefully prepared, well written account of the disease or surgical condition presented. Both medical and surgical cases are reported. The volume is well worth a careful study.

HENRY M. MOSES.

Physical Diagnosis

THE ESSENTIALS OF PHYSICAL DIAGNOSIS. By Robert W. Buck, M.D. Philadelphia, W. B. Saunders Company, 1934. 259 pages, illustrated. 8vo. Cloth, $3.00.

This book can be highly recommended to the student. It is a concise treatise on physical diagnosis that presents the subject in a way that should be most helpful to the tyro. It begins with the history taking, and then proceeds to deal with the patient as a whole with consideration of his psychological and constitutional make up.

The examination of the patient is carefully undertaken beginning with the head and continuing through the whole body. The student is therefore carefully guided through the complete physical examination of the patient whereas in most treatises on the subject the major attention is directed to the examination of the chest and the student is then left to obtain his information on examination of other parts of the body from various special texts.

At the end of each chapter is a well selected bibliography from which more detailed information can be obtained.

In our opinion this is an excellent book, well written in an easily readable style and will be a great help to the student of physical diagnosis.

ARTHUR E. LAMB.

Diseases of the Eye

MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. Fourteenth Edition. By Charles H. May, M.D. Baltimore, William Wood & Company, 1934. 496 pages, illustrated. 8vo. Cloth, $4.00.

The 14th Edition of this remarkable little volume comes to us again with all the enthusiasm and vigor of a first edition but without those errors and omissions which are so apt to characterize a first edition. One can hardly be too enthusiastic about it. It certainly fulfills in a very generous way the purpose for which it was written. Each new edition has stepped up to the forefront of ophthalmological progress, and in this instance one is particularly enthused when he finds that the author has been assisted in the revision by such able and scientific workers as he refers to in his preface to the 14th edition. The reviewer wishes to compliment the author on the new illustrations. Particularly clear are those on pages 2 and 3, illustrating the technique of everting the eyelid. Of course every reviewer should make some suggestions which to his mind might improve the edition. The only one which at this time suggests itself is that the gentleman appearing in Figure 36 and at various places throughout the book, would do well to purchase a more up-to-date collar. One might be forced to admit, however, that such a collar would guarantee a certain amount of cooperation.

The finished ophthalmologist, as well as the student and general practitioner would do well to have this volume at hand for occasional quick review, and it is invaluable for the lecturer who would have an orderly arrangement in mind before stepping into the pit.

JOHN N. EVANS.

The Mind

HOW THE MIND WORKS. By Cyril Burt, M.A., Ernest Jones, M.D., Emanuel Miller, M.D., and William Moodie, M.D. Edited by Cyril Burt. New York, D. Appleton-Century Company, 1934. 336 pages. 12mo. Cloth, $2.50.

This book is a collection of talks given over the air to the British public under the auspices of the British Broadcasting Company by a group of distinguished Englishmen, each a specialist in his own field. Names such as Dr. Ernest Jones, one of the best of "the psychoanalysts"; William Moodie, Medical Director of the London Child Guidance Clinic; Cyril Burt, Professor of Psychology in the University of London, and Emanuel Miller are appended to these special chapters.

Although edited, the book in its complete form is essentially as given over the air, and is an outstanding example of clear, simple English. The subject matter is considered under three main headings "How the Mind works (a) in the adult; (b) in the Child; (c) in Society." It is considered from as scientific an angle as possible. It is excellent for the uninformed and doubting layman, who, if curious, will find an answer to many of his questions within its pages. The Chapters dealing with the problem of "How the Mind works in Society" are particularly fascinating. The reader is introduced to the psychology of sex, nations, politics, leisure, art and religion.

Not in a long time has the reviewer been so instructively entertained, by such an easily readable book. It is given a high passing mark.

HAROLD R. MERWARTH.

Gynecology

A TEXT-BOOK OF GYNAECOLOGY FOR STUDENTS AND PRACTITIONERS. By James Young, M.D. Third Edition. New York, The Macmillan Company, 1933. 411 pages, illustrated. 8vo. Cloth, $3.75.

The third edition of Dr. Young's Gynecology has been thoroughly revised and rewritten. The author has brought each chapter up to present day ideas and opinions. Students will find the volume an excellent text book, and practitioners will gain much from it, both for study and for reference.

The etiology, pathology, symptoms and treatment of gynecologic disease, as set forth, are given in detail and are excellent.

Section IX, which is given over to operative gynecology, is not given in enough detail to be of much value to a gynecological operator.

WILLIAM SIDNEY SMITH.

Silicosis

THE PNEUMONOKONIOSES (Silicosis). Bibliography and Laws. By George G. Davis, M.D., Ella M. Salmonsen and Joseph L. Earlywine. Chicago, Industrial Medicine, Inc., 1934. 482 pages. 8vo. Cloth, $7.50.

The Pneumonokonioses is essentially a medico-legal reference book. It should be of use, however, to those interested in the subject from the standpoint of pathology, internal medicine, roentgenology or public health. Three hundred and forty odd pages are devoted to bibliography and various indices, compiled by Miss Salmonsen of the John Crerar Library, whose very complete work on the literature of vitamines will be recalled. References to pneumonokoniosis from 1556 to 1933 are listed, classified, indexed and cross-indexed.

The second section by Dr. Davis and Mr. Earlywine presents the occupational disease and Workman's Compensation laws of each state bearing upon pneumonokoniosis. Important relevant decisions in each state are included.

Other volumes are promised, which will include supplementary bibliographic reports, changes in state laws, and possibly a more comprehensive legal analysis, including the laws of Canada, England, and other countries.

TASKER HOWARD.

Genito-Urinary Organs

SURGICAL PATHOLOGY OF THE GENITO-URINARY ORGANS. By Arthur E. Hertzler, M.D. Philadelphia, J. B. Lippincott Company [c. 1931]. 286 pages, illustrated. 8vo. Cloth, $5.00.

With his "Surgical Pathology of the Genito-Urinary Organs" Arthur E. Hertzler has again scored a success in a field of the pathology of surgery. Written in his inimitable and forcible style, with numerous exceptionally clear and apt illustrations, he handles the subject from a practical and surgical point of view. The chapters on tumors of the testicle, hyperplasias of the prostate and hyper nephroma, are particularly illuminating.

He sanely sidesteps uncertain and slippery paths of unestablished knowledge, frankly admitting ignorance when such exists, and expounds truths which have been accepted. His conclusions are founded as in previous monographs, in that greatest of all teachers, experience, and the seeing, instead of merely looking, attitude.

To the general surgeon especially, and the student of genito-urinary surgery in the male generally, this volume is heartily recommended.

MAX LEDERER.

Prostate Gland

THE DANGEROUS AGE IN MEN. By Chester Tilton Stone, M.D. New York, The Macmillan Company, 1934. 105 pages, illustrated. 12mo. Cloth, $1.75.

This brief book intended for laymen can be read in one evening as its pages number less than one hundred. The author has earnestly endeavored, in laymen's terms, to discuss the varied disorders and diseases of the prostate gland and vesicles and their prevention. While there are many points that are very well taken, a professional man cannot altogether subscribe to a number of ideas expressed and implied in the book. As a matter of fact, a casual lay reader might have misunderstanding or exaggerated ideas particularly if the individual were of a "nervous" or neurotic type. This is particularly true since a very large percentage of the functional disorders of sex are of a purely psycho-neurotic nature. Might it not be wiser to attack this problem by way of the general profession rather than direct to the layman? It would seem to the reviewer that a regular annual physical examination including rectal examination and careful history would cover the field of disorders and their possible prevention.

The author would do well, we believe, to stress more strongly the very large percentage of disorders caused by the contraction of venereal disease infection. Younger males must be taught the harmful effects also of the varied excesses and abusive habits, and the end-results which they may produce. The author of the book rather leaves the impression that true prostatism or hypertrophy may result from the unnatural exercise of the physiologic sexual function, which, in the light of our present knowledge, is not true. True hypertrophy previously described

as a "retrogressive condition of advancing years" is seemingly more of systemic than of local etiology. There is more and more evidence to show that this histo-pathologic change is associated with disturbance of function of the internal glands.

It has not been the experience of the reviewer in clinical practice that inflammatory or hypertrophic changes of the prostate usually result in males in a prolonged period of continence following previous normal regular sexual relationships.

It would appear, in the light of present custom and experience that those individuals who encounter any symptoms indicating disturbance of the sexual or urinary organs should consult their own physician for proper advice and consultation when necessary.

We believe there is danger in wide publicity concerning sexual matters among laymen (other than venereal disease), that harm may be done in increasing the number of those who are sexually neurotic and neurasthenic.

Other than those conditions of prostatic hyperplasia and acute bacterial infections of the prostate, nature itself takes care of the lion's share of those who lead reasonably normal sexual lives and of many who do not. Instinct and common sense tell the individual whenever he has made any great error and any untoward symptoms will prompt him to consult the physician.

The author is to be complimented particularly on chapter twelve entitled "Psychic and Physical Harmony." All those contemplating matrimony would profit by reading these few valued golden words of advice.

AUGUSTUS HARRIS.

BOOKS RECEIVED

Books received for review are acknowledged promptly in this column; we assume no other obligation in return for the courtesy of those sending us the same. In most cases, review notes will be promptly published shortly after acknowledgment of receipt has been made in this column.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 14, Number 4. (Chicago Number.) August, 1934. Issued Serially one number every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 nos.), Paper, $12.00; Cloth, $16.00.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, etc. Volume 3, 44th Series, 1934. Edited by Louis Hamman, M.D. Philadelphia, J. B. Lippincott Company [c. 1934]. 327 pages, illustrated. 8vo. Cloth, $3.00.

BRONCHOSCOPY, ESOPHAGOSCOPY AND GASTROSCOPY. A Manual of Peroral Endoscopy and Laryngeal Surgery. By Chevalier Jackson, M.D., and Chevalier L. Jackson, M.D. Third Edition. Philadelphia, W. B. Saunders Company, 1934. 485 pages, illustrated. 8vo. Cloth, $9.00.

PAPERS OF CHARLES V. CHAPIN, M.D. A Review of Public Health Realities. Selected by Frederic P. Gorham, Sc.D. Edited by Clarence L. Scamman, M.D. New York, The Commonwealth Fund, 1934. 244 pages. 8vo. Cloth, $1.50.

EXPERIMENTAL PHYSIOLOGY. By Sir Edward Sharpey-Schafer, F.R.S. Fifth Edition. New York, Longmans, Green & Company, 1934. 168 pages, illustrated. 8vo. Cloth, $2.20.

MODERN TREATMENT IN GENERAL PRACTICE. Edited by Cecil P. G. Wakeley, D.Sc. Baltimore, William Wood and Company, 1934. 426 pages, illustrated. 8vo. Cloth, $4.00.

HUMAN STERILITY. Causation, Diagnosis, and Treatment. A Practical Manual of Clinical Procedure. By Samuel R. Meaker, M.D. Baltimore, The Williams and Wilkins Company, 1934. 276 pages, illustrated. 8vo. Cloth, $4.00.

PRACTICAL TALKS ON HEART DISEASE. By George L. Carlisle, M.D. Springfield, Ill., Charles C. Thomas [c. 1934]. 153 pages. 8vo. Cloth, $2.00.

MOTHERS' GUIDE WHEN SICKNESS COMES. By Roger H. Dennett, M.D., and Edward T. Wilkes, M.D. Garden City, N. Y., Doubleday, Doran & Company, 1934. 400 pages. 8vo. Cloth, $2.50.

BENJAMIN RUSH. Physician and Citizen, 1746-1813. By Nathan G. Goodman. Philadelphia, University of Pennsylvania Press, 1934. 421 pages, illustrated. 8vo. Cloth, $4.00.

THE ANATOMY OF SURGICAL APPROACHES. By L. C. Kellogg, M.D. Baltimore, William Wood & Company, 1934. 134 pages, illustrated. 12mo. Cloth, $1.50.

ELECTROCARDIOGRAPHY. By Chauncey C. Maher, M.D. Baltimore, William Wood & Company, 1934. 250 pages, illustrated. 8vo. Cloth, $4.00.

THE MEDICAL AND ORTHOPAEDIC MANAGEMENT OF CHRONIC ARTHRITIS. By Ralph Pemberton, M.D., and Robert B. Osgood, M.D. New York, The Macmillan Company, 1934. 403 pages, illustrated. 8vo. Cloth, $5.00.

THE COMPLEAT PEDIATRICIAN. Practical. Diagnostic, Therapeutic and Preventive Pediatrics. For the Use of Medical Students, Internes, General Practitioners and Pediatricians. By Wilburt C. Davison, M.D. Durham, N. C., Duke University Press, 1934. 8vo.

CONCEPTION PERIOD OF WOMEN. By Dr. Kyusaku Ogino. English Translation by Dr. Yonez Miyagawa. Harrisburg, Pa., Medical Arts Publishing Company [c. 1934]. 94 pages. 12mo. Leatherette, $1.00.

PHYSICAL DIAGNOSIS. By Richard C. Cabot. Eleventh Edition. Baltimore, William Wood & Company, 1934. 540 pages, illustrated. 8vo. Cloth, $5.00.

MANIPULATIVE TREATMENT FOR THE MEDICAL PRACTITIONER. By T. Marlin, M.D. New York, Longmans, Green & Company, 1934. 133 pages, illustrated. 8vo. Cloth, $3.75.

DISEASES OF THE SKIN. A Handbook of Dermatology for Practitioners and Students. By S. Ernest Dore, M.D., and John L. Franklin, M.D. New York, D. Appleton-Century Company, Inc., 1934. 410 pages, illustrated. 12mo. Cloth, $5.00.

HYGIENE FOR FRESHMEN. By Alfred Worcester, M.D., and Henry K. Oliver. Springfield, Ill., Charles C. Thomas [c. 1934]. 151 pages. 8vo. Cloth, $1.50.

THE CARE AND FEEDING OF CHILDREN. By L. Emmett Holt, Jr., M.D. Fifteenth Edition. New York, D. Appleton-Century Company, Inc., 1934. 259 pages. 12mo. Cloth, $1.25.

THE PROSPECTIVE MOTHER. A Handbook for Women During Pregnancy. By J. Morris Slemons, M.D. Third Edition. New York, D. Appleton-Century Company, Inc., 1934. 311 pages. 12mo. Cloth, $2.00.

A TEXTBOOK OF HISTOLOGY. By Harvey E. Jordan, Ph.D. New York, D. Appleton-Century Company, Inc. [c. 1934]. 738 pages, illustrated. 8vo. Cloth, $7.50.

DAS GLAUKOMPROBLEM UND DIE GLAUKOMOPERATIONEN. By Dr. Leopold Müller. Wien, Wilhelm Maudrich, 1934. 108 pages. 8vo. Paper, Rm. 8.

AN INTRODUCTION TO SEX EDUCATION. By Winifred V. Richmond, Ph.D. New York, Farrar & Rinehart [c. 1934]. 312 pages. 8vo. Cloth, $2.50.

Enjoying Old Age

The interest aroused by the recent special number of the "British Journal of Physical Therapy" devoted to disorders of old age and their prevention will no doubt be continued in the second part of the series now issued. It is clear from statistics that one effect of the increased average age of the population is an increased number of elderly people, and it is essential, both socially and individually, that old age be made as healthy and useful a time as possible.

The word "comfortable" has been deliberately avoided because, as will be shown later, there has probably been too much effort in the past by younger relations in making their old folk comfortable to the detriment of their physical and mental health. At the same time the diminution of complaints will considerably administer to comfort, and the present issue of the journal mentioned above deals more especially with chronic bronchitis, deafness, kidney disease, and skin disease in old age.

Chronic bronchitis is regarded as a sort of Cinderella among disorders of the chest. Little is known about its origin, and as a result little is often enough done for its relief. The new method of approach is described, which consists of the exact study of the movements of the bronchial tubes and lungs on the X-ray screen after injection of lipiodol. Drs. J. B. Christopherson and Marjorie Broadbent consider, as a result of their studies, that there is much closer connection between the nervous disorders of the lungs of the asthmatic type and chronic bronchitis than is commonly realized. They consider that the conception of an inflamed condition of the bronchial lining membrane as the primary condition in bronchitis of a chronic type is misleading, the bacterial invasion being secondary to faults in the contraction and movements of the bronchial tubes. Treatment directed to putting this right is held to be more effective than much of the orthodox, text-book measures. Respiratory exercises are recommended as playing an important part in modern treatment, combined with pure dry air and open-air occupation.

The deafness of advancing years is the subject of another important article, but, unfortunately for present sufferers, most stress is laid upon the prevention of such trouble in early life. An interesting point is made with regard to one type of deafness in old people, and this concerns those instances where the trouble is due to diminishing perception of the impulses set up in the ear and progressive changes in the nerve of hearing. It is stated that smoking has a particularly bad influence on this type of hearing.

The Observer, London.

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[1]Jour. A. M. A., 101, July 15, 1933, 187.[2] Jour. A. M. A., 101, 1933, 1449.

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